IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

UTILITY PATENT SPECIFICATION

TITLE OF INVENTION: Internet/Intranet Software System to Audit and Manage Compliance

CROSS-REFERENCE TO RELATED APPLICATION: U.S. Provisional Application Serial Number 60/420,028. This application is based on U.S. Provisional Application Serial No. 60/420,028 filed on October 21, 2002. The inventors claim the benefit of Title 35, Section 119 of the U.S. Code based on said provisional application.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT: Not applicable

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING COMPACT DISC APPENDIX: Not applicable

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I. BACKGROUND OF THE INVENTION

A. Field of the Invention

[0001] The invention is directed at a method for helping certain specified types of commercial and retail businesses and operations ("regulated entities") conducting certain specified types of activities ("regulated activities"), to easily identify and comply with all applicable state and federal requirements, via intranet and/or the World Wide Web. ("WWW").

[0002] The invention is limited to the specified regulated entities because: (a) all applicable state and federal regulatory agency requirements may be directly predetermined for these entities via the WWW from the U.S. Code of Federal Regulations ("CFR") and corresponding state codes, without resort to site specific permits, licenses or approvals, and (b) all applicable requirements may be incorporated into electronic checklists capturing all such requirements for use in auditing compliance and for helping to assure on-going compliance at such regulated entities, via the WWW.

[0003] The invention is stems from a recognition that the structure and function of state and federal regulatory systems allows a predetermination of all state and federal regulatory requirements applicable to such regulated entities, which cannot be similarly predetermined for other types of operations, such as most larger industrial and manufacturing operations. Once determined, applicable requirements may be incorporated and formatted into comprehensive audit and compliance management systems for use by regulated entities, via the WWW.

B. State of the Art

[0004] Regulated entities located in the U.S. are often required to comply with various government regulatory requirements, including for example, environmental regulatory requirements. Additionally, employees and contractors working at various geographically dispersed facilities may be made to comply with "policy" requirements, not required as a matter of law. Moreover, employees and contractors at some facilities may be required to comply with requirements derived from contracts, including licensing or franchise agreements designed primarily to maintain revenues and control product quality.

[0005] Contract requirements may cover a wide range of areas, depending upon the purpose of the contract, including by way of example: service contracts, maintenance contracts, consulting contracts, and franchise contracts.

[0006] Franchise requirements are similar in many ways to regulatory requirements, and may include: reporting requirements, training requirements, requirements to comply with permits, accident reporting requirements, insurance requirements, non-compliance self-reporting requirements, requirements to comply with state and federal government regulations, permit compliance requirements, reporting of income and sales requirements, reporting of complaints requirements, confirmation of compliance with quality assurance requirements, and payment of fee requirements.

[0007] Regulatory agencies have a clear and well known interest in assuring compliance with regulations applicable to regulated entities. However, on-going compliance with franchise requirements including recordkeeping requirements, may be equally important to a franchiser where compliance must be tracked and non-compliance penalties assessed based in part, upon performance.

[0008] For example, a consultant to the city of Oakland California recently commented at a hearing on cable television franchise agreement compliance requirements, in relevant part as follows: "The new ordinance and franchise

agreement should operate together to establish adequate record keeping and reporting requirements which will enable staff to better track the operator's performance under the franchise. Additionally, the ordinance and franchise agreement together should establish strong performance guaranties, and readily enforceable remedies for non-compliance." (Interim Cable franchise Compliance Report, William L. Lowrey, Miller & Van Eaton L.L.P., City of Oakland California, May 10,2000)

[0009] While some facilities may be subject to policy and contract requirements, virtually all U.S. business entities are subject to one or more regulatory requirements promulgated by state or federal regulatory agencies.

1. Identification Regulatory Requirements

[0010] It is obviously difficult, if not impossible, for an entity or facility to comply with regulatory requirements if the facility has no way of efficiently determining what the requirements are.

[0011] Unlike applicable policy or contract requirements identified by mutual agreement of the parties, regulations derive from statutes enacted by congress and various state legislatures and address a wide variety of different areas including environmental quality, health and safety, immigration and naturalization, for example.

[0012] For example, some key environmental laws enacted by congress include: the Clean Water Act ("CWA"); the Clean Air Act ("CAA"); the Resource Conservation and Recovery Act ("RCRA"); Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA").

[0013] By further example, federal health and safety laws include the Occupational Health & Safety Act, and the Mine Health & Safety Act.

[0014] By further example, federal securities laws include the Securities and Exchange Act.

[0015] State legislatures are generally empowered to enact more stringent statutes, but cannot enact less stringent legislation. After statutes are enacted, "regulatory agencies" usually promulgate regulations detailing specific requirements that must be complied with in order for regulated entities to attain legislative objectives. Therefore, when seeking to identify specific regulations applicable to any regulated facility, or regulated entity, one must consider both state and federal regulatory requirements.

[0016] It is important to recognize, and well known to those schooled in the art, that all regulations, promulgated by all federal agencies, are codified in and readily available from, the U.S Code of Federal Regulations. ("CFR")

[0017] By way of example, all environmental regulations promulgated by the U.S. EPA are contained and indexed at Title 40 of the U.S, CFR, and available via the WWW.

[0018] By way of another example, all health and safety regulations promulgated by the U.S. Occupational Safety and Health Administration are contained in the CFR under Title 29, and available via the WWW.

[0019] By way of yet another example, all health and safety regulations promulgated by the U.S. Mine Safety and Health Administration are also published in the CFR under Title 29 and available via the WWW.

[0020] By way of yet another example, all securities regulations promulgated by the U.S. Securiti s and Exchange Commission are published n the CFR under Title 17, and available via the WWW .

[0021] Hence, the text of every federal regulation promulgated by every federal agency applicable to every regulated entity in the U.S. may be accessed, and electronically copied via the WWW.

[0022] It is also important to recognize that all regulations promulgated by various state agencies are likewise codified or contained in various state administrative codes, and readily available for copying, via the WWW. Hence, the text of every state regulation promulgated by every state agency applicable to every regulated entity in the U.S. may be accessed, and electronically copied via the WWW.

[0023] For example, all environmental regulations promulgated by the Louisiana Department of Environmental Quality are codified in Title 33 of the Louisiana Administrative Code, within a section referred to as the "Environmental Regulatory Code".

[0024] However, it is also important to recognize, but not well known to those schooled in the art, that certain state and federal regulatory requirements are equally applicable to diverse types of different business entities, irrespective of type, so long as all entities within a single type conduct at least one regulated activity in common.

[0025] For example a hospital that stores heating fuel oil in an underground storage tank would be subject to the same overall state and federal "UST" regulatory requirements as would be applicable to a gasoline station storing fuel for retail sale to automobile customers.

[0026] Therefore, a compliance management system addressing the needs of either regulated entity may be used for both, subject only to adjustments based on rather subtle differences in the manner in which regulated activities are conducted at both facilities. And once identified, all applicable requirements may

be formatt d into electronic compliance forms and organized into an audit and compliance system leading to essence of the present invention.

2. Compliance With Applicable Requirements

[0027] Regulated entities have historically found it very difficult to comply with state and federal government regulations, including environmental regulations.

[0028] Regulations are clearly complex and present challenges to all types of facilities, both large and small.

[0029] But, it is generally acknowledged that smaller and less sophisticated regulated entities have had a more difficult time in complying with regulatory requirements than larger industrial facilities.

[0030] For example, prior to the instant invention, regulated entities had clearly been among the worst violators of environmental regulatory requirements, and had been frequently cited for violations of environmental regulations.

[0031] A review of the Louisiana Department of Environmental Quality ("LDEQ") enforcement records for the 3rd Quarter of 2001, indicated that 28% of the 250 enforcement actions filed by LDEQ resulted from inspections of small automotive-related businesses alone. And, 31% were for vapor recovery violations; 30% waste tire violations; 18% hazardous waste violations; 17% underground storage tank violations and 4% water violations.

[0032] Because of the pressing need for compliance help among smaller entities, in enacting the 1990 amendments to the federal Clean Air Act, congress directed the U.S. EPA to help small business by develop environmental compliance management systems that identified applicable requirements and facilitated compliance with th se requirements.

[0033] It should be well known to one well schooled in the art that these systems have largely not been forthcoming from U.S. EPA .

[0034] It should be equally well known to one well schooled in the art that smaller regulated entities require complete and comprehensive compliance management systems that both simplify and address all aspects of compliance.

[0035] It should also be clear to one well schooled in the art that many smaller regulated entities simply did not have the financial and people resources needed to comply without help.

[0036] Unlike many industrial and manufacturing facilities, most smaller regulated entities could not afford to hire regulatory consultants and as a result could not access the expertise needed to analyze and interpret thousands of pages of complex regulations.

[0037] The prior art was helpful but ineffective because, while providing may good tools for the well informed, it had not provided systems capable of simply identifying or stating precisely what applicable regulatory requirements were for regulated entities.

[0038] Prior art reviewed included: U.S. 6,449598; U.S. 6,490,565; U.S 5,793,636; U.S. 6,122,622; U.S. 6,163,732; U.S. 6,341,287; U.S. 6,397,115; U.S. 6,064,968; U.S. 6,449,598; U.S. App. 20020023109; U.S. App. 20020023109.

3. Training, Recordkeeping and Auditing Needs

[0039] All facilities, large and small need good training, recordkeeping and auditing systems to better assure compliance with applicable requirements. Yet, regulated entities hav largely been without systems to help efficiently maintain records, train employees, audit for compliance and confirm on-going compliance with applicable regulatory requirements.

a. Recordkeeping, Forms and Checklists

[0040] Virtually all regulatory agencies promulgate recordkeeping requirements applicable to regulated entities. For example, recordkeeping and annual reporting requirements of the Securities & Exchange Commission; accident recordkeeping requirements of the Occupational Safety and Health Administration, etc.

[0041] Environmental recordkeeping requirements had proven to be particularly difficult and expensive, especially for many smaller geographically dispersed regulated entities, such as fast food franchises and convenience stores.

[0042] For example, presenting testimony before congress, the owner of the "Q-Markets" convenience store chain stated in relevant part: "When I began my company in 1994, I filled out all of the necessary paperwork myself or in-house. Since that time, my store managers spend an additional two hours per week filling out paper work. I also have been forced to hire an outside firm to assist Q-Markets with its record keeping at an annual cost of $3,000 per store."

[0043] Various forms and checklists had been developed to help regulated entities comply with regulatory requirements, including environmental recordkeeping requirements.

[0044] A review of the prior art, identifies various types of "forms", "forms engines" and checklists used for various compliance purposes including

compliance with environmental health and safety requirements. These forms and checklist were not very helpful, because generally not sufficiently detailed, facility specific or very meaningfully in addressing *specific requirements* applicable to each facility.

[0045] Clearly, nothing had been disclosed that provided an owner or operator of any single regulated entity with any form or checklist that addressed all applicable state and federal recordkeeping requirements. Moreover the forms and checklists that had been disclosed, were generally not very "user friendly" and incapable of being easily used by many smaller regulated entities.

[0046] Forms and checklist had not been designed to suit the specific needs of regulated entities.

[0047] Understanding and use of existing forms and checklists was very time consuming and often required regulatory and technical expertise not possessed by most smaller regulated entities.

[0048] For example, after reviewing 300 pages and 46 forms published in it's "Petroleum Marketers Book of Federal Compliance Forms", supposedly designed to help facilities comply with environmental requirements, a representative of the National Association of Convenience Stores, concluded the forms were of little use because: " [T]o fully understand and properly fill out these forms, one must read hundreds of pages of supporting material."

[0049] Some helpful, but largely ineffective patent art reviewed in this area, included: U.S. 6,460,042; U.S. 5,774,887, U.S. 5,765,140; U.S. 5,276,869; U.S. 6,449,598, U.S. 5,813,009

b. Training

[0050] Training had also been a particularly vexing problem for many regulated entities, particularly those with few, relatively uneducated employees, and often experiencing a disproportionately high employee turnover rate.

[0051] Even if training was provided to management, it was not usually made available to many hourly employees required to comply.

[0052] Computer based training ("CBT") systems as well as electronic tests to confirm employee knowledge of facility policy requirements, had been disclosed, but the art had not disclosed systems providing specific training needed to understand specific regulatory requirements.

[0053] The prior art reviewed in this area included: U.S. 5,489,213; U.S. 6,449,598.

c. Auditing

[0054] Most smaller regulated entities had not been audited at all, or certainly not as frequently as larger industrial or manufacturing facilities.

[0055] Traditional environmental compliance audits at industrial and manufacturing facilities usually required travel by teams of expert auditors to each facility, at substantial cost.

[0056] Even where audits were conducted at larger facilities, they were usually conducted every 2 or 3 years, leaving plenty of time for non-compliance in between.

[0057] Despite their poor compliance records, it was usually cost prohibitive to audit regulated entities for regulatory compliance, in particular where geographically dispersed over a wide area.

[0058] Even where available, existing audit protocols were often not facility specific thereby resulting in the need for the auditor to review hundreds if not thousands of pages of regulations in an effort to find regulations that directly applied to a facility.

4. Need for Facility Specific Audit and Compliance Management Systems

a. Prior Software Systems

[0059] Prior to the instant invention, comprehensive compliance management systems, combining requirement identification, recordkeeping, training, and auditing functions simply had not been made available for use by regulated entities.

[0060] Most WWW software designers had concentrated on addressing the needs of major industrial facilities and developed software designed to address a large variety of site specific recordkeeping, data manipulation, permitting and reporting tasks, generally faced by larger industrial facilities.
[0061] Simply stated, certainly advancing the art, none of these patent applications disclosed any method to readily identify all applicable state and federal regulatory requirements applicable to any particular regulated entity, nor provide WWW systems to minimize chance of non-compliance before it occurred.

[0061] U.S. patent art reviewed, included: U.S. Patent App. 20020023109 ("MSDS" requirements and shipping regulations); U.S. Patent App. 20020120642 ("legislative obligations"); U.S. Patent App.20030065690 (certain specific regulatory agency industrial air emission reporting requirements); U.S. Patent App. 20030069894 (computer reliability requirements); U.S. Patent App. 20020138574 (non-regulatory "standard, process or procedure"); U.S. Patent App. 20020194014 (risk based management system testing); U.S. Patent App.

20030065690 (regulatory *reporting* requirements); U.S. Patent App. 20030065690 (computer reliability requirements); U.S. Patent App. 20030083916 (*contractual* compliance requirements); U.S. Patent App. 20030120528 (supply chain management); U.S. Patent App. 20030065690(Compliance systems designed to serve needs of a particular industry); U.S. 6,449,598 (determination of whether or not employees read applicable policy requirements); U.S. 6,490,565; U.S. 5,897,619, U.S. 4,803,039, U.S. 5,664,112 and U.S. *5,726,*884 (compliance with specific reports or environmental certifications); U.S. 6,151,586 (compliance with health plan requirements); U.S. 6,351,689 and 6,546,314 (polling remote locations for compliance data);

b. More Recent Software Systems

[0063] Recent patent filings have disclosed certain improvements designed to better help larger industrial facilities comply, without offering facility specific help to regulated entities.

[0064] Perhaps most importantly these filings did little to provide the simple, easy to use WWW based systems needed by a convenience store clerk, tire shop worker or dry cleaner to quickly and efficiently comply with all applicable state and federal regulatory requirements.

[0065] U.S. Patent No. 5,623,403 disclosed a computerized "rule application system" for identifying non-compliance with *certain known and specific* motor vehicle registration laws, *identified by the "government".* It compared two sets of information at periodic intervals to detect instances of non-compliance. When such instances of non-compliance are detected (*after the non-compliance had already occurred*) the invention flagged the appropriate records and generated reports and communications to notify an entity and allow it to take the appropriate corrective action. While certainly helpful, to verify compliance status with a particular rule under evaluation, the system did nothing to either address many

other regulatory requirements applicable to a regulated entity or do anything to prevent a violation from happening in the first place.

[0066] U.S. Pat. No. 6,163,732 disclosed a computer system and method for determining compliance of a chemical product with *certain known and specified* government regulations applying to the product. The composition of a chemical being compared by the computer system to was compared to a stored set of government regulation standards and flagged as either complying or non-complying. Once again, the invention was specifically intended to evaluate compliance with a single requirement or group of requirements and offered nothing to assist a regulated entity in complying to all applicable requirements promulgated by any single state or federal agency, nor to prevent a violation from happening before it occurred.

[0067] U.S. Patent App. 20030153991 relied on essentially the same "computer rule application" system, as in '403, but, in addition *purported* to provide a methodology for managing compliance with *all* of "rules" applicable to *all* facilities.

[0068] In trying to distinguish his invention from '403, the inventor stated in relevant part: "Despite these automated rule application systems, [in '403] there is still a need for a system that can address *all* of an entity's concerns, regarding compliance management , including: making an entity aware of the rules.." (emphasis added) [see '991 at 0015]

[0069] One reasonably well schooled in the art will certainly recognize the difficulty if not impossibility of making a user "aware" of the rules, absent disclosure of a clear method of identifying the rules to begin with.

[0070] However, the "rule database", included in '991, supposedly to identify all rules "prescribed by legislation and regulations" [at 0047] and to make the user

"aware of the rules", fell short of doing so. (See '991 at [0050]) Rather, the inventor simply avoided the issue, stating only that "various rule application systems are known to those skilled in the art, and will not be reiterated here." [See '991 at 0061]

[0071] The instant invention clearly improves upon both '403 and '991 by disclosing an innovative, efficient and reliable method for identifying *all* state and federal regulatory requirements applicable to regulated entities, as well as to prospectively help *prevent* non-compliance at such entities before it occurs.

[0072] The present invention also improves upon the teachings of '991 by minimizing the inadvertent and unnecessary creation of records confirming non-compliance, that might be used against a facility by a regulatory agency and thereby unfairly penalize a good faith voluntary employee or contractor of a compliance management system.

[0073] It is a preferred embodiment of the present invention to allow an employee or contractor to create and maintain records that *must* be kept on file as a matter of law, but also allow a facility to automatically delete records not required to be maintained as a matter of law.

[0074] By way of example, LDEQ environmental regulations *require* gas stations and convenience stores to maintain records on-site confirming maintenance of adequate financial assurance for UST's. However, gas stations are not required to maintain records on-site confirming compliance with UST design requirements. Maintenance of such records by use of '991 might inadvertently create records of non-compliance that might latter be used against the facility by a regulatory agency in an enforcement proceeding.

II. BRIEF SUMMARY OF THE INVENTION

[0075] Th present invention now is described more fully hereinaft r with reference to the accompanying drawings or figures, in which preferred embodiments of the inv ntion are shown. The present invention seeks to overcome compliance problems faced by regulated entities, by providing: (a) a method to allow any employee or manager at any regulated entity to quickly and efficiently identify policy, contract or state and federal regulatory requirements applicable to a regulated entity; (b) systems to train personnel, facilitate recordkeeping and audit compliance with applicable requirements, and; (c) systems to greatly facilitate and help assure and confirm on-going compliance with applicable requirements.

[0076] To accomplish this, the invention allows users to download preformatted electronic checklists addressing all state and federal requirements, applicable to a regulated entity, rather than requiring the user to download and interpret the actual text of the complex regulations.

[0077] The invention is founded on a recognition that *all* regulatory agency requirements for *some* types of regulated entities (usually retail and commercial facilities, or "regulated entities") undertaking the same or similar regulated activities, may be accessed from regulatory government regulatory databases, without having to consider many additional unique site specific conditions contained in permits and approvals issued to other industrial and manufacturing facilities.

[0078] State and federal regulatory requirements, (including environmental requirements) for commercial and retail regulated entities rarely, if ever, include *site specific* requirements. For example, site specific air, water, or waste permit requirements, usually applicable at larger industrial or manufacturing facilities, such as chemical plants, steel plants, petrochemical plants, and power plants are not applicable to the regulated entities that form an object of the present invention. Such facilities are made subject to "general" , "area wide", or "permits

by rule", if and when permits are required at all , making it practical to accurately identify all possible "general" permit requirements applicable to any type of regulated entity, directly from a CFR or state administrative code database. For example, virtually all industrial and commercial facilities discharging wastewater to receiving water streams must obtain a discharge permit and periodically file discharge monitoring reports demonstrating compliance with effluent limits applicable to the discharge. One of several different predetermined DMR's *will* be applicable to every regulated entity subject to general permit requirements. Hence, a system may be designed to predetermine all possible DMR's and allow the user to select the particular DMR that applies to his/her facility based upon the nature of the specific discharge at a regulated entity facility. One such predetermined DMR is shown in FIG. 50. This approach cannot be taken with respect to larger industrial facilities subject to site specific discharge permits, with various effluent limitations and other conditions that are individually negotiated between facility and regulatory agency on a case by case basis. Therefore, it is an object of the invention to intentionally limit the scope of applicability of the compliance management system provided herein in order to gain the important ability to identify *all* regulatory requirements applicable to those regulated entities within the scope of the invention.

[0079] As a result, according to the teachings of the invention, a user may easily predetermine *all* state and federal regulatory requirements applicable to regulated entities directly from the U.S. Code of Federal Regulations ("CFR") and corresponding state codes, and efficiently manage facility operations in accordance with applicable requirements.

A. Identification of Applicable Requirements

[0080] It is a primary objective of the instant invention to disclose a method for allowing a regulated entity employee or contractor to quickly, efficiently and accurately identify *all* regulatory requirements applicable to a regulated entity,

including for example, environmental requirements, via the WWW without need for expert assistance, and once accomplished to incorporate such regulations into a plurality of different C-Records, to be made available and used to audit and thereafter to assure on-going compliance applicable regulatory requirements.

[0081] A regulated entity user may, of course be prompted to enter entity policy and contract requirements directly into a database in order to generate applicable C-Records using a standard C-Record template designed to accommodate such requirements.

[0082] It is a preferred embodiment of the present invention to develop a series of "master templates" each addressing all state and federal regulatory requirements promulgated by *any* single U.S. state and/or federal agency, (i.e. U.S. EPA, OSHA, SEC, et. al) applicable to various regulated activities conducted by a plurality of regulated entities.

[0083] It is also a preferred embodiment of the present invention that templates must be strictly limited in applicability to those regulated entities, for which *all* state and federal regulatory requirements may be identified and determined directly from the CFR and state administrative codes, as opposed, for example, to prior systems using templates for systems designed to address individual site specific permit and other requirements applicable to larger industrial and manufacturing facilities.

[0084] FIG. 1 shows a master environmental regulation template identifying major groupings and sub-groupings of specific regulations promulgated by the U.S. EPA, sufficient to address all of environmental requirements promulgated by the U.S.EPA and the LDEQ applicable to each regulated entity, including, for example: automobile dealerships; chiropractor, physician and dental offices; hospitals; paint and body shops; motor vehicle air conditioner shops, tire shops;

dry clean rs; airport passenger and baggage screening operations, and convenience store or gas stations.

[0085] One well schooled in the art will recognize that each of the "Air", "Water", "Waste", "UST", "Other", and "Notification" groupings and sub-groupings depicted in FIG. 1 may be easily correlated with specific enumerated sections and subsections of the U.S. CFR (and state administrative codes) addressing progressively more and more detailed groupings and sub-groupings of regulations and regulatory requirements applicable to the regulated entities intended to covered by each master template.

[0086] By way of example, various Louisiana environmental regulations, are correlated with template groupings in FIG. 1. Additionally, by way of example, the corresponding federal requirements applicable to UST's are also shown, for example in FIG. 1.

[[0087] In this manner, groupings of regulations may be quickly and easily identified for a plurality of different major groupings and sub-groupings of regulated entities, including, for example:

[0088] An automobile dealership module depicted in FIG.2 identifying federally regulated activities and corresponding groupings of regulatory requirements applicable to new and used vehicle truck and automobile dealerships.

[0089] A chiropractor, doctor and dentist office module depicted in FIG.3 identifying federally regulated activities and corresponding groupings of environmental regulatory requirements applicable to chiropractor, doctor and dentist offices.

[0090] A hospital module depicted in FIG.4 identifying federally regulated activities and corresponding groupings of regulatory requirements applicable to hospitals.

[0091] A paint and body shop module depicted in FIG. 5, identifying federally regulated activities and corresponding groupings of regulatory requirements applicable to paint and body shops.

[0092] A motor vehicle air conditioning shop module depicted in FIG. 6 identifying federally regulated activities and corresponding groupings of regulatory requirements applicable motor vehicle air conditioning shops.

[0093] A tire shop module depicted in FIG.7 identifying federally regulated activities and corresponding groupings of regulatory requirements applicable to tire shops.

[0094] A dry cleaner module depicted in FIG. 8 identifying regulated activities and corresponding groupings of regulatory requirements applicable to dry cleaners.

[0095] An airport screeners module depicted in FIG.9 identifying federally regulated activities and corresponding groupings of regulatory requirements applicable to airport passenger and baggage screening operations.

[0096] A convenience store or gas station module [FIG. 10] identifying federally regulated activities and corresponding groupings of regulatory requirements applicable to convenience stores and gas stations.

[0097] One well schooled in the art will also recognize that similar master templates might easily be constructed to address other types of regulatory requirements promulgated by other state and federal regulatory agencies,

applicable to a the same or different regulated entities, within the scope of the invention.

[0098] It is a preferred embodiment of the present invention that anyone reasonably well schooled in the arts might easily use the present invention to create C-Records addressing all state and federal regulatory requirements applicable to regulated entities, via the WWW, following the teachings of the invention.

[0099] It is also a preferred embodiment of the present invention that one reasonably well schooled in the art s might easily format C-Records to address all applicable state and federal regulatory requirements following the teachings the present invention.

1. Developing Master Templates

[0100] According to the invention, by reference to FIG. 11, and by way of example depicting state and federal environmental requirements, appropriate sections of the Title 40 of the CFR (1) and Louisiana Administrative Code (2) may be accessed and reviewed and all environmental regulations identified as necessary to develop "master" regulatory templates for each agency (3) that regulates activities conducted by one or more regulated entities, set forth in each master template.

[0101] For example, the same underground storage tank regulations would be applicable to various diverse regulated entities such as gas stations or convenience stores storing fuel in underground storage tanks; dry cleaners storing cleaning chemicals in UST's or; hospitals storing heating oil in a UST.

2. Development of C-Records

[0102] Next, again with reference to FIG. 11, for example, and according to the invention, a service provider or other consultant or contractor, reasonably well schooled in the art might create a series of draft UST C-Records (4) addressing each and every possible compliance option available to a regulated entity under state and federal regulations, in order to assure that at least one C-Record would be available for any and all compliance options potentially available to any of all regulated entities. Based on the teachings of the invention, individual UST design C-Records would be created for *all* possible tank designs, under the assumption that one or more regulated entities would at one time or another elect to install one or more reinforced fiberglass tanks, galvanic protected steel tanks, Impressed current protected steel tanks, and/or double-walled fiberglass tanks for example.

[0103] It is a preferred embodiment of the present invention that the system be configured to allow a user to identify the particular type of regulated entity being operated when completing a facility profile to be used to identify the particular master templates applicable to a regulated entity under various agency regulations.

[0104] Again with reference to FIG. 11, it is also a preferred embodiment of the present invention that the system be configured to allow a regulated entity user to quickly and easily select the particular C-Records that apply to his/her regulated entity 5, and assign 6 completion responsibilities accordingly

[0105] And, once C-Records are created, applicable requirements might then be arranged into "Primary Requirements" 7 and "Detailed Requirements" 8. Hyperlinks may easily be established to "Learn More", 9 "See Text", 10 and "Take Test" 11 documents and be incorporated into each formatted C-Record (12), as shown in FIG. 11. C-Records may then be assigned for completion to various employee/contractor positions (13) as directed by an authorized user provided in the facility profile.

[0106] In the Louisiana convenience store example shown, and shown in FIG. 11, C-Record assignment might be made to one of eight different positions, depicted as A-H (14) with 1 to 25 different C-Records assigned to each position and a total of 74 C-Records actually needed to address *all* state and federal environmental regulatory requirements applicable to Louisiana convenience stores, for example.

[0107] In addition , according to the teachings of the invention, a system may be configured to establish separate Audit and Compliance Clipboards for each position and provide a series of hyperlinks between each Audit (15) or Compliance Clipboard (16) to each C-Record required to be completed by each position.

B. Accessing Invention via Intranet or the WWW

[0108] A user may access the invention by regulated entity intranet or the WWW.

[0109] Some customers, with multiple geographically dispersed facilities might elect to contract with a licensed Internet service provider, to develop and install a regulated entity intranet, with all centralized databases to be maintained on a regulated entity server.

[0110] Other customers, with multiple geographically dispersed facilities might elect to contract with a licensed Internet service provider, making the invention available to regulated entity subscribers via the WWW, while maintaining all centralized databases on the providers server.

[0111] In either case, a potential user of the invention must be told of the benefits and limitations of its use.

[0112] An example of the manner in which a pot ntial user would access the invention via a service provider (17) is shown in FIG. 12.

[0113] The service provider may describe the compliance management services offered sufficient for a potential user to determine applicability for use at his/her regulated entity. (18)

[0114] It is important that the service provider explain (19) how the system works and what it will cost. It will generally not serve the interests of a regulated entity to begin to use but then soon terminate use of the invention. Also, employees and contractors must be made to understand that the use of the invention cannot *guarantee* full compliance, but that it is a valuable tool toward that end.

[0115] A plurality of different C-Records addressing requirements applicable to many different types of facilities may be conveniently stored on a server maintained by the service provider, to be made available for use by each particular facility depending upon regulated activities undertaken at each facility.

C. Completion of Facility Profile

[0116] With reference to FIG. 13, the system may be configured to direct a facility manager or other authorized user at each regulated entity facility to access the system via the WWW, identify the specific entity for which information is to be provided and complete a "facility profile" (20) indicating the specific facility type to which the facility belongs, specifics about the regulated activities conducted at the facility. The profile might also prompt the user to check boxes identifying regulated activities undertaken at the facility (21) and download appropriate facility C-Records (22) based upon information provided.

[0123] In accordance with the teachings of th invention, and with referenc to FIG. 11, note (6), a facility manager, or other authorized regulated entity mployee or contractor might be prompted to identify specific employee and/or contractor positions to be held responsible for completing and submitting various C-Records.

[0124] Moreover, the system might be configured to facilitate this process by providing various default assignments to those positions most likely to be held responsible at other facilities of a similar type. The facility manager, or other authorized regulated entity employee or contractor may then either accept or reject various C-Record completion responsibility assignments by use of a simple checklist.

[0125] Applicable C-Records might be stored in the service provider's server until the profile is completed and submitted at which time they may be electronically downloaded to each individual facility database, and stored in various files created for each position.

E. Employee or Contractor Testing, Auditing & Periodic Confirmation of Compliance

[0126] According to the teachings of the invention, a system might be easily configured to automatically e-mail all responsible employees and contractors to access an intranet site or a service providers web page, and provide the security information needed to access an Index Page for each position, containing various electronic "buttons" or hyperlinks, including links labeled "Audit", "Comply/Confirm" and "Status".

[0127] In the preferred embodiment of the present invention, each e-mail would direct each employee or contractor to first access assigned C-Records to audit

[0117] It is a preferred mbodiment of the instant invention to obtain needed information via facility profile using a simple straightforward question and answer format, and allowing the authorized regulated entity employe or contractor to electronically check boxes to expedite transfer of information describing regulated activities undertaken at a facility.

[0118] For example, with reference to FIG. 13, one question might be - does the facility operate UST's? (23). If so, what kind of UST's? (24) what kind of piping systems? (25) what kind of tank release detection monitoring has been installed? (26) and what kind of pipe release detection monitoring has been installed? (27)

[0119] Every time that a box is checked, the system identifies one or more C-Records that are applicable to the facility and eliminates many more that are not.

[0120] Based upon answers provided, the system identifies and transfers or "loads" the appropriate C-Records depending upon UST tank type (28), piping type (29), tank release detection system type (30) and piping release detection system type (31).

[0121] Similarly, anyone schooled in the art will understand that the system might easily be configured to provide similar facility profiles matching needs of a plurality of different types of regulated entities.

[0122] In fact anyone reasonably well schooled in the art will understand that similar facility profiles might be developed for virtually any regulated entity subject to virtually any and all specific policy, contract and/or regulatory requirements.

D. Assignment of C-Records

current facility compliance with regulatory requirements., and thereafter to periodically confirm on-going compliance thereafter.

[0128] The manner of determining the timing in which different employees or contractors comply and confirm on-going compliance with applicable requirements is a preferred embodiment of the instant invention and depends upon the particular responsibilities of each particular employee or contractor, and whether or not there are any changes in operation at a facility.

[0129] Some employees or contractors may not be required to confirm on-going compliance until the occurrence of an event requiring compliance. Others may be required to comply and confirm daily, monthly or when a certain event occurs. Such an event might be scheduled, or unscheduled and random or non-random.

[0130] For example:

[0131] A requirement to test a UST leak detection system annually would be a non-random scheduled event. All such events could easily be scheduled by asking a facility manager to complete a testing schedule when completing a facility profile. (FIG. 13, note (20))

[0132] A requirement to inspect vapor controls at a convenience store daily would be a regularly scheduled daily event.

[0133] A sudden closure of a UST or fuel spill at a convenience store would be an unscheduled event at a convenience store.

[0134] An observation of a passenger meeting a certain profile in an airport check-in line might be an unscheduled event.

[0135] An irregular delivery of fuel to a convenience store would b a random unscheduled event.

[0136] The installation of a new UST at a convenience store would be a random unscheduled event.

F. Regularly Scheduled Events

[0137] In any event, unlike past art, the present invention may be configured to greatly minimize the possibility of non-compliance by scheduling completion of events capable of being scheduled and notifying all responsible users if and when necessary to comply and/or confirm compliance with applicable state and federal requirements.

[0138] The system may easily be configured to notify or alert users *before* its time to comply with scheduled requirements.

[0139] By way of example, the system may be configured to require users to both comply and confirm compliance by completing and submitting appropriate C-Records as per a schedule. The schedule might be daily, monthly, or annually for example.

[0140] Where compliance must be confirmed everyday, the employee or contractor might simply be told to sign on and confirm compliance everyday or the software might be configured to generate an e-mail to the employee or contractor telling him/her to sign on and confirm compliance everyday.

G. Randomly Scheduled Events

[0141] Where compliance is randomly scheduled, the software might easily be configured to generate an e-mail message to one or more employees or

contractors based upon schedule information originally provided by the manager of the regulated entity or other authorized representative when completing each facility profile. By way of example, an authorized user might identify the date that specific control equipment was installed and the system could easily be configured to notify the appropriate user to perform an annual test and certify compliance within 360-days from the date identified.

H. Unscheduled Events

[0142] The system might be configured to direct responsible employees and contractors, required to complete one or more C-Records after the occurrence of an unscheduled event , to do so when the event occurs. By way of example, a facility attendant might be directed to inspect certain control equipment everyday (and complete appropriate C-Records) as required by applicable requirements, but also notify authorities and complete an appropriate C-Record if and when an unexpected fuel spill should occur.

I. Facility Changes Resulting in New Compliance Requirements

[0143] It is a preferred embodiment of the present invention that the system might be easily configured to provide a mechanism to allow the manager of the regulated entity of or other authorized individual to indicate if and when changes are planned which necessitate new compliance requirements and automatically notify all responsible employees and contractors to comply with new applicable requirements if and when necessary.

[0144] In accordance with the teachings of the present invention, the manager of the regulated entity or other authorized individual might be directed to revise the facility profile consistent with any changes proposed (ie add a UST or close a UST) before the change was to be implemented. (FIG.13,note 32) The system might be configured to automatically launch an e-mail notification to all

employees or contractors aff cted by the proposed change. Once this is done, the system could be configured to display a default setting indicating non-compliance with C-Record completion requirements for such C-Record by all employees or contractors, which would remain displayed on a status monitor until each C-Record was submitted by each Employee or contractor so notified.

J. Accessing Clipboards and Completing C-Records

[0145] In one use of the invention, the employee or contractor might be directed by a bank or insurance company to audit facility compliance with applicable requirements for which he/she is responsible. The directive might be made in response to an application for a mortgage from a prospective purchaser of a convenience store business from a major oil company, for example.

[0146] With reference to FIG. 14, each responsible individual at the convenience store might sign on to an intranet page or WWW site under his/her position (33) and elect to either audit for compliance with applicable requirements or confirm on-going compliance with applicable requirements (34). In this case the users would be elect to audit for facility compliance with applicable state and federal requirements. The bank might be authorized by the current and/or prospective owner to monitor the audit results (33).

[0147] Depending upon the audit results, the bank may elect to finance the acquisition, and if so, may condition the commitment on the new purchaser's subscribing to use the system to confirm on-going compliance in the future. In this case, all employees and contractors might be directed by a manager of the regulated entity to sign on to the system and complete C-Records for which he/she is responsible, to periodically confirm on-going compliance at the facility.

[0148] In either case, the employee or contractor would access either his/her Audit Clipboard (35) or Compliance Clipboard (36) and click on, complete and

submit appropriate C-Records (37) or (38) into the facility C-Records database (39).

[0149] The system may easily be configured to allow management the option of preserving the C-Record in the database (40) where required to be kept by law, or alternatively, automatically deleting the record (41) after monitoring and reviewing results (42) where not required to be kept as a matter of law.

K. Monitoring of Compliance Results

[0150] With reference to FIG. 15, the system may be configured to allow any authorized employees or contractors, such as managers, contract or policy administrators, lawyers, bankers and/or insurers etc., to monitor audit or on-going compliance results and status for any one facility or for all facilities, via the WWW, at any time. For example, the system might be configured to allow a district manager of the regulated entity for a chain of 8 convenience stores to sign on to the WWW and access an audit and/or compliance status monitoring screen for each of the 8 facilities for which he/she is responsible. (43)

[0151] In the example provided, the district manager of the regulated entity might observe that facility #8 was not in compliance and might therefore elect to send the manager of the regulated entity an e-mail inquiring as to the problem (44).

[0152] In the example provided, the manager of the regulated entity might himself/herself observe non-compliance by a employee or contractor at his/her facility, or, at the request of the district manager, elect to directly contact the responsible individual inquiring as to the problem (45). The system could easily be configured to allow the manager of the regulated entity to see which C-Record suggests non-compliance (46) and be configured to reset the C-Record and delete all reference to the problem, if and only if records retention was not required by the applicable requirements. (47)

L. Changes in Activities or Facility Operation

[0153] The manager of the regulated entity may revise the Facility profile any time that changes occur necessitating compliance with new regulatory requirements and the system might be configured to automatically prompt employees or contractors to sign on to the site, comply and confirm on-going compliance with new requirements. (See FIG. 13, note 32)

M. Equipment Needed to Use the Invention

[0154] The present invention requires the use of one or more processing units or CPU with main memory, input means, such as a keyboard and a mouse connected to the CPU/main memory; and two output devices, a display (such as a CRT, monitor, or other screen device) and a printer, also connected to the CPU/main memory. Storage device (e.g. a disk drive or a hard drive) communicates with the CPU/main memory and is the memory unit for storing application software, a "Facility profiler" database, a C-Records database, and a "Waste" database. The system also includes appropriate operating system software.

[0155] The preferred implementation platform of the present invention is a system implemented on an IBM compatible personal computer having at least

four megabytes of main memory (RAM) and an eighty megabyte hard disk drive, with Microsoft Windows as the employee or contractor interface and Microsoft Excel and Microsoft Outlook as the database management software. Individual personal computers can be networked to give multiple employees or contractors access to common databases. A Dynamic Data Exchange ("DDE") link may be used to communicate data between applications. However, other operating systems could be used. The system may be also be designed to support a wide range of web browsers. Other web browser enhancements may also be incorporated into the system for extra features.

[0156] For security purposes, access to documents may be limited or based on prior authorization. Codes or "tags" may be inserted into the document to identify attributes and for formatting purposes.

IV. ESSENTIAL ELEMENTS OF THE INVENTION

[0157] The essential elements of the invention include:

[0158] Software systems and method of identifying all requirements, including regulatory requirements applicable to a type of regulated entity via the WWW;

[0159] A series of C-Records incorporating applicable requirements into electronic checklists;

[0160] A "facility profile" to be completed by a manager of the regulated entity to describe facility operations, sufficient to determine which of the applicable requirements (and C-Records) apply to the facility;

[0161] Software systems configured to allow each manager or other authorized representative of the regulated entity to assign C-R cord completion responsibilities to specific employees or contractors;

[0162] A WWW Internet site that may be accessed by regulated entity managers and employees or contractors;

[0163] A security system to limit accessibility for different classes of employees or contractors;

[0164] Software systems configured to assist employees or contractors in auditing and/or complying and/or confirming continuing compliance with applicable requirements.

[0165] Software systems configured to allow authorized managers and others to monitor on-going compliance status of individual employees or contractors, at single facilities, or at all facilities via the WWW.

III. BRIEF DESCRIPTION OF THE DRAWINGS AND FIGURES

[0166] All figures represent a preferred embodiment, but other alternate embodiments are within the scope of the present invention.

[0167] FIG. 1 Master Environmental Regulation Template.

[0168] FIG. 2 Automobile Dealership Environmental Regulation Template.

[0169] FIG. 3 Chiropractor, Doctor, Dentist Environmental Regulation Template.

[0170] FIG. 4 Hospital Environmental Regulation Template.

[0171] FIG. 5 Paint and Body Shop Environmental Regulation Template.

[0172] FIG. 6 Motor Vehicle Air Cond. Environmental Regulation Template.

[0173] FIG. 7 Tire Shop Environmental Regulation Template.

[0174] FIG. 8 Dry Cleaner Environmental Regulation Template.

[0175] FIG. 9 Airport Screener Environmental Regulation Template.

[0176] FIG. 10 Convenience Store Environmental Regulation Template.

[0177] FIG. 11 Development and Distribution of C-Records.

[0178] FIG. 12 Role of Internet Service Provider.

[0179] FIG. 13 Completion of Facility profile.

[0180] FIG. 14 Completion of C-Records.

[0181] FIG. 15 Monitoring Compliance.

[0182] FIG. 16 National Archives and Records Administration WWW site.

[0183] FIG. 17 CFR page showing federal UST regulations.

[0184] FIG. 18 Louisiana Department Environmental Quality web site.

[0185] FIG. 19 LAC page showing state UST regulations .

[0186] FIG. 20 First page galvanic UST repair C-Record.

[0187] FIG. 21 Second page galvanic UST repair C-Record.

[0188] FIG. 22 Document linked to a "Learn More" hyperlink.

[0189] FIG. 23 Document linked to a "See Text" hyperlink.

[0190] FIG. 24 Document linked to a "Take Test" hyperlink.

[0191] FIG. 25 System sign-in page to access use of invention.

[0192] FIG. 26 Screen showing Manager of the regulated entity signing in.

[0193] FIG. 27 Screen describing purpose of Facility profile.

[0194] FIG. 28 Screen requesting confirmation UST use.

[0195] FIG. 29 Screen requesting number of UST's.

[0196] FIG. 30 Screen requesting UST unique identifier numbers.

[0197] FIG. 31 Screen requesting UST type information.

[0198] FIG. 32 Screen requesting UST tank repair information.

[0199] FIG. 33 Screen requesting UST piping repair information.

[0200] FIG. 34 Screen requesting UST tank monitoring information.

[0201] FIG. 35 Screen requesting pressurized pipe information.

[0202] FIG. 36 Screen requesting UST pipe monitoring information.

[0203] FIG. 37 Screen requesting suction pipe information.

[0204] FIG. 38 Screen requesting UST overfill protection information.

[0205] FIG. 39 Screen requesting UST closure information.

[0206] FIG. 40 Screen requesting facility fuel dispensing information.

[0207] FIG. 41 Screen requesting Stage I applicability information.

[0208] FIG. 42 Screen showing Stage I applicability calculator.

[0209] FIG. 43 Screen requesting Stage II applicability information.

[0210] FIG. 44 Screen showing Stage II applicability calculator.

[0211] FIG. 45 Screen requesting type Stage II system installed.

[0212] FIG. 46 Screen requesting vehicle repair information.

[0213] FIG. 47 Screen requesting wastewater information.

[0214] FIG. 48 Screen requesting wastewater discharge information.

[0215] FIG. 49 Screen requesting wastewater type information.

[0216] FIG. 50 Screen showing sample Discharge Monitoring Report form.

[0217] FIG. 51 Screen showing Weekly Waste Storage Inventory.

[0218] FIG. 52 Screen showing Facility C-Record Assignor .

[0219] FIG. 53 Screen showing main page provider web site.

[0220] FIG. 54 Screen showing Who We Are.

[0221] FIG. 55 Screen showing What We Do.

[0222] FIG. 56 Screen showing How We Do It.

[0223] FIG. 57 Screen showing What it Cost.

[0224] FIG. 58 Screen showing Our Promise.

[0225] FIG. 59 Screen showing Legal Considerations.

[0226] FIG. 60 Screen showing Availability.

[0227] FIG. 61 Screen showing Regulation Alert.

[0228] FIG. 62 Screen showing DEQ Enforcement Summary.

[0229] FIG. 63 Screen showing In The News – CMS.

[0230] FIG. 64 Screen showing In The News – EPA Fines.

[0231] FIG. 65 Screen showing In The News – EHSforms.

[0232] FIG. 66 Screen showing In The News – Electronic Records.

[0233] FIG. 67 Screen showing Manager of the regulated entity sign-in page.

[0234] FIG. 68 Screen Station Manager Compliance Clipboard.

[0235] FIG. 69 Screen page 1 UST Financial C-Record.

[0236] FIG. 70 Screen page 1 SARA C-Record.

[0237] FIG. 71 Screen page 1 UST Certification Posting C-Record.

[0238] FIG. 72 Screen page 1 UST Spill Notification C-Record.

[0239] FIG. 73 Screen page 2 UST Spill Notification C-Record .

[0240] FIG. 74 Screen page 3 UST Spill Notification C-Record .

[0241] FIG. 75 Screen page 4 UST Spill Notification C-Record .

[0242] FIG. 76 Screen page 5 UST Spill Notification C-Record .

[0243] FIG. 77 Screen page 1 UST Release Notification C-Record .

[0244] FIG. 78 Screen page 1 UST Release Notification C-Record.

[0245] FIG. 79 Screen page 2 UST Release Notification C-Record.

[0246] FIG. 80 Screen page 3 UST Release Notification C-Record.

[0247] FIG. 81 Screen page 3 UST Release Notification C-Record.

[0248] FIG. 82 Screen UST tank addition .

[0249] FIG. 83 Screen new plastic tank addition.

[0250] FIG. 84 Screen e-mail notification new tank addition.

[0251] FIG. 85 Screen UST Installation Contractor Clipboard.

[0252] FIG. 86 Screen page 1 UST Plastic Tank Design C-Record.

[0253] FIG. 87 Screen UST Testing Contractor Clipboard.

[0254] FIG. 88 Screen page 1 UST Tight Test C-Record.

[0255] FIG. 89 Screen page 2 UST Tight Test C-Record.

[0256] FIG. 90 Screen sign in page Facility Attendant.

[0257] FIG. 91 Screen Facility Attendant Compliance Clipboard.

[0258] FIG. 92 Screen Stage I Inspection C-Record.

[0259] FIG. 93 Screen Stage II Inspection C-Record.

[0260] FIG. 94 Screen Stage II Sign Inspection C-Record.

[0261] FIG. 95 Screen page 1 UST Fuel Transfer C-Record.

[0262] FIG. 96 Screen sign in page UST Monitoring Contractor.

[0263] FIG. 97 Screen UST Monitoring Contractor Clipboard.

[0264] FIG. 98 Screen page 1 UST ATG Monitoring C-Record.

[0265] FIG. 99 Screen page 1 UST Liquid Monitoring C-Record.

[0266] FIG. 100 Screen page 2 UST Liquid Monitoring C-Record.

[0267] FIG. 101 Screen page 1 UST Vapor Monitoring C-Record.

[0268] FIG. 102 Screen page 1 UST Interstitial Monitoring C-Record.

[0269] FIG. 103 Screen page 1 UST SIR Monitoring C-Record.

[0270] FIG. 104 Screen page 1 UST Inventory Control Monitoring C-Record.

[0271] FIG. 105 Screen page 1 UST Manual Gauging Monitoring C-Record.

[0272] FIG. 106 Screen sign in page UST Testing Contractor.

[0273] FIG. 107 Screen UST Testing Contractor Clipboard.

[0274] FIG. 108 Screen pag 1 Flow Restrictor Test C-Record.

[0275] FIG. 109 Screen page 1 Flow Shutoff Test C-Record.

[0276] FIG. 110 Screen page 1 Flow Alarm Test C-Record.

[0277] FIG. 111 Screen page 1 IC 60-Day Test C-Record.

[0278] FIG. 112 Screen page 1 UST Tight Test C-Record.

[0279] FIG. 113 Screen page 2 UST Tight Test C-Record.

[0280] FIG. 114 Screen page 3 UST Tight Test C-Record.

[0281] FIG. 115 Screen page 1 UST Pipe Tight Test C-Record.

[0282] FIG. 116 Screen page 1 UST Galvanic Tank Inspect C-Record.

[0283] FIG. 117 Screen sign in page UST Install Contractor.

[0284] FIG. 118 Screen UST Install Contractor Compliance Clipboard.

[0285] FIG. 119 Screen page 1 UST Plastic Tank Repair Standards C-Record.

[0286] FIG. 120 Screen page 1 UST Galvanic Tank Repair Standards C-Record.

[0287] FIG. 121 Screen page 1 UST IC Tank Repair Standards C-Record.

[0288] FIG. 122 Screen page 1 UST Contractor Certification C-Record.

[0289] FIG. 123 Screen page 1 UST ATG Installation Standards C-Record.

[0290] FIG. 124 Screen page 1 UST Liquid Installation Standards C-Record.

[0291] FIG. 125 Screen page 1 UST Vapor Installation Standards C-Record.

[0292] FIG. 126 Screen page 1 UST Interstitial Installation Standards C-Record.

[0293] FIG. 127 Screen page 1 UST SIR Installation Standards C-Record.

[0294] FIG. 128 Screen page 1 UST Inventory Installation Standards C-Record.

[0295] FIG. 129 Screen page 1 UST Manual Tank Install Standards C-Record.

[0296] FIG. 130 Screen page 1 UST Flow Restrict Design Standards C-Record.

[0297] FIG. 131 Screen page 1 UST Flow Shutoff Design Standards C-Record.

[0298] FIG. 132 Screen page 1 UST Flow Alarm Design Standards C-Record.

[0300] FIG. 133 Screen page 1 UST Plastic Pipe Design Standards C-Record.

[0301] FIG. 134 Screen page 1 UST Galvanic Pipe Design Standards C-Record.

[0302] FIG. 135 Screen page 1 UST IC Pipe Design Standards C-Record.

[0303] FIG. 136 Screen Employee or contractor Status Page.

[0304] FIG. 137 Screen example first primary requirement.

[0305] FIG. 138 Screen example first detailed requirement.

[0306] FIG. 139 Screen example second primary and detailed requirement.

[0307] FIG. 140 Screen example third primary and detailed requirement.

[0308] FIG. 141 Screen Employee or contractor Status Page 2.

[0309] FIG. 142 Sign in screen Stage I Installation Contractor.

[0310] FIG. 143 Screen Stage I Install Contractor Compliance Clipboard.

[0311] FIG. 144 Screen Stage I Design Standards C-Record.

[0312] FIG. 145 Sign in screen Stage II Install Contractor.

[0313] FIG. 146 Screen Stage II Install Contractor Compliance Clipboard.

[0314] FIG. 147 Screen page 1 Stage II Permits C-Record.

[0315] FIG. 148 Screen page 1 Stage II CARB Standards C-Record.

[0316] FIG. 149 Screen page 1 Stage II Design Standards C-Record.

[0317] FIG. 150 Screen sign in page Stage II Test Contractor.

[0318] FIG. 151 Screen Stage II Test Contractor Clipboard.

[0319] FIG. 152 Screen page 1 Ann Static Pressure Test C-Record VB.

[0320] FIG. 153 Screen page 1 Ann Dynamic Pressure Test C-Record VB.

[0321] FIG. 154 Screen page 1 5-Yr Liquid Blockage Test C-Record VB.

[0322] FIG. 155 Screen page 1 Ann Static Pressure Test C-Record VA.

[0323] FIG. 156 Screen page 1 Ann Air Liquid Volume Test C-Record VA.

[0324] FIG. 157 Screen page 1 5-Yr Liquid Blockage Test C-Record VA.

[0325] FIG. 158 Screen page 1 Initial Pressure Test C-Record VB.

[0326] FIG. 159 Screen page 1 Initial Dyn. Pressure Test C-Record VB.

[0327] FIG. 160 Screen page 1 Initial Liq. Block Test C-Record VB.

[0328] FIG. 161 Screen page 1 Initial Pressure Test C-Record VA.

[0329] FIG. 162 Screen page 1 Initial Dyn. Pressure Test C-Record VA.

[0330] FIG. 163 Screen page 1 Initial Liq. Block Test C-Record VA.

[0331] FIG. 164 Screen Station Compliance Monitor.

[0332] FIG. 165 Screen System Compliance Monitor.

IV. DETAILED DESCRIPTION OF THE FIGURES AND THE PREFERRED EMBODIMENTS OF THE INVENTION

[0333] The present invention now is described more fully hereinafter with reference to the accompanying drawings or figures, in which preferred embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. The present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which preferred embodiments of the invention are shown. Like numbers refer to like elements throughout.

A. Developing C-Records

1. Identifying Applicable Requirements

[0334] Anyone well schooled in the art will recognize that applicable policy and contract requirements may be easily identified and directly incorporated into C-Records, without significant complication. However, he/she will also recognize that it is far more difficult, and heretofore not described, how to design a system capable of identifying all state and federal regulatory requirements applicable to regulated entities.

[0335] FIG. 16 is a computer screen image of the Code of Federal Regulations main web page on the WWW that might be accessed to identify all federal environmental regulations at Title 40 Protection of the Environment. The system may be used by selecting a title and pressing "Go". (48) The employee or contractor may be confident that the r gulatory requirements are current by noting the date of publication of the regulations. (49)

[0336] FIG. 17 is a computer screen image of a Code of Federal Regulations (CFR) web page accessed via the WWW, with the highlighted portion (50) identifying specific requirements applicable to facilities electing to upgrade underground storage tanks by addition of galvanic cathodic protection devices.

[0337] FIG. 18 is a computer screen image of the Louisiana Department of Environmental Quality (LDEQ) main web page on the WWW that might be accessed to identify state requirements, of all kinds, potentially applicable to any and all facilities operating in Louisiana. The site includes links to all regulations of the LDEQ, presented in Microsoft WORD format. The service provider might click on "Rules and Regulations" to access UST regulations applicable to cathodic upgrade , for example. (51), or might view recent enforcement actions filed by the regulatory agency (52) .

[0338] FIG. 19 is a computer screen image of a Louisiana Department of Environmental Quality (LDEQ) web page presenting specific LDEQ regulatory requirements applicable to facilities electing to upgrade a UST tank by addition of with cathodic protection(53) as well as piping requirements. (54)

2. Format Applicable Regulatory Requirements Into Electronic Checklist

[0339] FIG. 20 is a computer screen image of the first page of a UST Galvanic Tank Design C-Record created by incorporating and formatting federal regulatory requirements copied and transferred from Title 40 CFR and Title 33 of the Louisiana Administrative Code. C-Record development, including arrangement of applicable requirements into "Primary Requirements" (55) and "Detailed Requirements" (56) is a preferred embodiment of the present invention.

[0340] It is a preferred embodiment of the invention that each C-Record may be configured with "Learn More" 57, "See Text" 58 and "Take Test" 59 hyperlinks.

[0341] It is also a preferred embodiment of the invention that each C-Record may be configured to summarize the subject of the C-Record (60), space for the employee or contractor or the system to insert a facility identification number (61), the identification of the employee or contractor assigned responsibility for completing a C-Record (62) and space for the employee or contractor or system to automatically insert the date of the completion of the C-Record. (63)

[0342] It is another preferred embodiment of the invention that each C-Record may be configured to prompt the employee or contractor to confirm the existence of records on file to confirm compliance with the detailed requirements as shown in FIG. 21, note (64).

[0343] It is yet another preferred embodiment of the invention that each C-Record may be configured to include a preformatted area to be used to show the month for which a C-Record is being (FIG. 20, note 65) as well as an area in which to insert the unique ID number of the employee or contractor completing the C-Record. (FIG. 20, note 66).

[0344] As shown in FIG. 21, it is yet another preferred embodiment of the invention that each C-Record may be configured so that all "Detailed Requirements" must be checked (64) by the employee or contractor in order for the facility to be in compliance with each Primary Requirement. By way of example FIG. 21 shows a computer screen image depicting the second page the C-Record shown in FIG. 20, identifying some of the Detailed Requirements that must be met in order to confirm compliance with the primary requirement.

[0345] It is another preferred embodiment of the present invention that each Detailed Requirement be followed by an electronic link to the particular LDEQ regulation responsible for the requirement. (FIG. 21, note 65) In this manner, the system may be configured to allow a service provider to automatically replace the

same Detailed Requirement in all C-Records if and when the state regulatory agency might modify the regulation upon which the C-Record provision is based.

3. Creating Internal Links in C-Records

[0346] It is a preferred embodiment of the present invention that each C-Record include electronic links to other documents containing additional information that may be used to train employees and contractors about the regulatory requirements addressed in each C-Record as well as the manner of using and completing each C-Record, and also to test each employee or contractor to confirm understanding of requirements.

[0347] FIG. 22 at note (67)is a computer screen image depicting a document linked to the "Learn More" button shown in the C-Record presented in FIG. 20. At note 57. Relevant legal and technical information that might be presented in a "plain English" format to better explain each regulatory requirement. For example, the section might inform the employee or contractor that state and federal requirements are the same, the purpose of the regulations, that certain types of repairs can only be made by a "certified" repairman.

[0348] FIG. 23 at note(68) is a computer screen image depicting a document linked to the "See Text" button shown in the C-Record presented in FIG. 20 at note (58) It is a preferred embodiment of the present invention that this document contain the actual unabridged text of the state and federal regulations giving rise to the primary regulatory requirement. Hence, the employee or contractor or other consultant, such as a legal advisor might use this feature to expedite legal review of regulatory interpretations provided by the invention.

[0349] FIG. 24 at note (69)is a computer screen image depicting a document linked to the "Take Test" button shown in the C-Record presented in FIG. 20. 59 It is a preferred embodiment of the present invention that the system be

configured to provide the option to require that each Employee or contractor be tested prior to being allowed to us or complete C-Records. For example a test on the subject of repairs to UST's might ask: If notice can be avoided if repairs must be made by a manufacturers authorized representative (70), If prior notice must be given if repairs are made as per national code (71), If the manager of the regulated entity can make repairs without first notifying the regulatory agency (72), If it will suffice if notice is provided within 30-days after making repairs (73), If can give notice within 30-days after making repairs if emergency (74), If a UST has to be tightness tested as soon as possible after starting to make repairs (75) If a UST has to be tightness within 30-days after finishing repairs (76) Same as note 76 (77) If a UST has to be tightness within 30-days after starting to make repairs (78) or If a UST has to be tightness within 30-days after completing repairs. (79). It is also a preferred embodiment of the present invention that the employee or contractor answer each question presented by checking either "True" (80) or "False" (81) to each question presented, and that the system be configured to preset correct answer default settings(82)

4. Completion of Facility profile

[0350] It is a preferred embodiment of the present invention that the facility profile be developed and formatted in accordance with existing documents required by regulatory agencies and already in the possession of each facility manager. By way of example, all information requested about UST's in the facility profile is directly obtainable by each manager of the regulated entity from a UST registration application form required to be filed by each facility operating one or more UST's, with the LDEQ.

[0351] FIG. 25 is a computer screen image, depicting a possible sign-in screen on an intranet or service providers WWW web site prompting a responsible user to provide certain identification and security information in addition to the company name, such as the "facility location number" (83) and "password" (84).

This featur will allow each employee, contractor or consultant serving at each of a plurality of different facilities to be assigned unique security information to better assure confid ntiality of information transmitt d.

[0352] FIG. 26 is a computer screen image showing a manager of a regulated entity (or other authorized individual) logging in to access and complete a facility profile. (85) It is a preferred embodiment of the present invention that the drop down screen provided may be populated with all possible employee, contractor, or consultant positions potentiality applicable to all facilities of the same or similar type. (i.e. automotive repair shops, airports, convenience stores, etc)

[0353] FIG. 27 is a computer screen image depicting a description of the purpose and importance of properly completing a facility profile. It is a preferred embodiment of the present invention that the system might be configured to inform the user that the manager of the regulated entity to answer all profile questions with simple "yes" or "no" answers, to identify applicable C-Records to be identified and transferred into a separate database for each facility and each employee or contractor at each facility.

[0354] FIG. 28 is a computer screen prompting a manager of a regulated entity to indicate whether the facility operates any underground storage tanks. ("UST's") If not, it is a preferred embodiment of the instant invention that the facility profile may be configured to omit all further questions relating to UST's and go to a screen querying about another type of operation or activity. But, if confirmed, the system may be configured to seek additional information about the particular UST's installed at the facility.

[0355] FIG. 29 is a computer screen prompting the manager of the regulated entity to indicate the number of UST systems (86) operated at the facility. This information may b necessary in order to format subsequent screens depicting information specific to each UST system installed at the facility.

[0356] FIG. 30 is a computer screen prompting a manager of a regulated entity to provide identification numbers assigned to each UST system by the regulatory agency.

[0357] FIG. 31 is a computer screen prompting a manager of the regulated entity to describe the different types of UST tanks and UST piping systems installed at the facility. This is necessary because different types of tanks and piping systems are subject to different types of design, installation and monitoring requirements.

[0358] It is a preferred embodiment of the present invention to include C-Records addressing all possible compliance that may be selected by a facility. For example, separate C-Records might be developed for all reasonably possible types of UST tanks that might be legally installed at a facility, namely: new fiberglass reinforced plastic tanks, (87) new steel tanks with galvanic cathodic protection, (88) new steel tank with impressed current cathodic protection, (89) new composite plastic tank, (90) upgraded steel tank with galvanic cathodic protection, (91) upgraded steel tank with galvanic impressed current cathodic protection, (92) upgraded re-lined steel tank with galvanic cathodic protection (93) upgraded re-lined steel tank with galvanic cathodic protection (94).

[0359] The system may be configured to identify and transfer C-Records that apply to the tanks and piping systems indicated and ignore those that are not. It is a preferred embodiment of the present invention that the system be configured to make it impossible for a employee or contractor to electronically check more than one box, indicating a particular type of tank, for each numbered tank or piping system. (95) (96)

[0360] It is also It is a pr ferred embodiment of the present invention that the system be configured to allow a employee or contractor to clear all boxes checked if necessary at any time prior to submitting a profile. (97)

[0361] FIG. 32 is a computer screen prompting a manager of a regulated entity to indicate what, if any repairs have been made to UST tanks, and if so what kind of *tanks* were repaired. This information is necessary because different types of repair standards apply to different types of tanks. The system may be configured to identify and transfer C-Records that apply to the repairs made and ignore those that are not.

[0362] FIG. 33 is a computer screen prompting the manager of a regulated entity to indicate if any repairs have been made to UST piping systems, and if so what kind of *piping systems* were repaired. This information is necessary because different types of repair standards apply to different types of tanks. The system may be configured to identify and transfer C-Records that apply to the repairs made and ignore those that are not.

[0363] FIG. 34 is a computer screen prompting a manager of a regulated entity to indicate the type of release detection systems installed to monitor for possible releases of stored substances from UST's. This information is necessary because different types of design and monitoring standards apply to different types of release detection monitoring systems. The system may be configured to identify and transfer C-Records that apply to the particular UST monitoring systems indicated to be present and ignore those that are not.

[0364] FIG. 35 is a computer screen prompting a manager of a regulated entity to indicate whether pressurized piping has been installed at the facility. This information is necessary because all pressurized piping systems are subject to release detection monitoring requirements while suction piping systems generally are not subject to these requirements. If a pressurized piping system has not

been installed, the system may b configured to skip the next question applicable to pressurized systems.

[0365] FIG. 36 is a computer screen prompting a manager of a regulated entity to indicate the type of release detection systems installed to monitor for releases from pressurized UST's. This information is necessary because different types of design and monitoring standards apply to different types of release detection monitoring systems. The system may be configured to identify and transfer C-Records that apply to the particular UST monitoring systems indicated to be present and ignore those that are not.

[0366] FIG. 37 is a computer screen querying the manager of a regulated entity to indicate whether suction piping has been installed at the facility. This information is necessary because suction piping systems may not be subject to release detection monitoring requirements depending upon design. The system may be configured to identify and transfer C-Records that apply to suction piping, (including a C-Record designed to confirm entitlement to exemption based on suction piping design), and ignore those that are not.

[0367] FIG. 38 is a computer screen querying the manager of a regulated entity to indicate the type of fuel spill and overfill protection control systems installed at the facility. This information is necessary because different types of design and operating standards apply to different types of systems. The system may be configured to identify and transfer C-Records that apply to the particular control systems installed and ignore those that are not.

[0368] FIG. 39 is a computer screen prompting a manager of a regulated entity to indicate whether the facility has closed a UST. This information is necessary because agency notification is required and standards vary significantly depending upon the length of time of closure. The system may be configured to identify and transfer C-Records that apply and ignore those that do not.

[0369] FIG. 40 is a computer screen prompting a manager of a regulated entity to indicate whether the facility dispenses fuel to motor vehicles. This information is necessary because a substantial number of LDEQ requirements may apply if fuel is dispensed. The system may be configured to skip to a screen querying the manager of the regulated entity to indicate whether the facility repairs motor vehicles, if fuel is not dispensed. The system may be configured to identify and transfer C-Records that apply and ignore those that do not.

[0370] FIG. 41 is a computer screen (that might be displayed if a regulated entity dispenses fuel), prompting a manager of the regulated entity to indicate whether the facility is subject to "Stage I vapor control requirements." This information is necessary because a substantial number of LDEQ regulatory requirements may apply if the facility is subject to these requirements.

[0371] It is a preferred embodiment of the present invention that the system may be configured to assist the manager, if the manager of the regulated entity does not know, by providing a "Stage I Vapor Control Requirements Calculator" , depicted in FIG. 42, that may be used to determine applicability. The calculator asks if the facility is located in any of several enumerated parishes or counties (98) and if yes the facility is subject to Stage I controls unless exempted under Step 2. (99) The systems queries if the facility is located in an enumerated parish or county, and sells less than 10,000 gallons of gasoline per month (100) and if so confirm exemption if records are maintained. (101) If not exempt, the system queries if the facility is located in another grouping of counties or parishes, and if so, if it sells less than 40,000 gallons of gasoline, (102) in which case it is exempt, but if not it is subject to Stage I requirements. (103). The system may be configured to identify and transfer C-Records that apply and ignore those that do not.

[0372] FIG. 43 is a comput r scr en (that might be displayed if a facility dispenses fuel), prompting a manager of the regulated entity to indicate whether th facility is subject to Stag II vapor control requirements. This information is necessary because a substantial number of LDEQ requirements may apply if the facility is subject to these requirements. It is a preferred embodiment of the present invention that the system may be configured to assist the manager, if the manager of the regulated entity does not know, by providing a "Stage II Vapor Control Requirements Calculator" , depicted in FIG. 44, that may be used to determine applicability. The system may be configured to identify and transfer C-Records that apply and ignore those that do not. Also, it is a preferred embodiment of the present invention that the system may be configured to prompt a manager of the regulated entity to provide the date that Stage I and Stage II vapor control systems were installed (not shown). This information may then be used to establish the dates by which testing (annual and 5-year equipment testing) must be performed. The system may be configured to identify and transfer C-Records that apply and ignore those that do not. FIG. 45 is a computer screen prompting a manager of a regulated entity to indicate the particular type of Stage II control system (if present) installed at the facility. This is necessary because two types are permitted and the design and testing requirements differ substantially depending upon the particular type installed.

[0373] FIG. 46 is a computer screen prompting a manager of a regulated entity to indicate whether the facility repairs motor vehicles. This information is necessary because a very substantial number of LDEQ regulatory requirements and C-Records may apply if repairs are made at the facility. The system may be configured to identify and transfer C-Records that apply and ignore those that do not.

[0374] FIG. 47 is a computer screen prompting a manager of a regulated entity to indicate whether the facility discharges waste water from the facility. This information is necessary because a substantial number of LDEQ requirements

may apply if waste waters are discharged. If so, a manager of the regulated entity may be prompted to indicate if the discharge is to a publicly owned treatment works (POTW) or to a lake, river, ditch or bayou.

[0375] FIG. 48 depicts a computer screen prompting a manager of a regulated entity to indicate if wastewater is discharged to a publicly owned treatment works ("POTW") or to receiving waters of the state. This information is necessary because discharge limits and reporting requirements are different depending on the specific material discharged and the specific waters into which the discharge is made. If the facility indicates a discharge to a POTW, a generic POTW reporting form is transferred into the facility database. If to receiving waters, additional information is required in order to determine which discharge requirements apply.

[0376] FIG. 49 depicts a computer screen prompting a manager of a regulated entity to further describe the nature of the waste water discharge from the facility by considering factors relied upon by the regulatory agency in determining the particular effluent limits and monitoring requirements to be made applicable to a facility, including the type of activity generating the water and the type of water body into which the discharge is to be made.

[0377] FIG. 50 is a computer screen depicting a sample Discharge Monitoring Report that might be applicable to a regulated entity, depending on the characteristics of the discharge defined in the screen shown in FIG. 49. Note that this DMR is proper and in accordance with all regulatory requirements for a facility discharging car wash waste waters plus stormwater run-off to fresh or saltwater via an oxidation pond (104) and it automatically establishes effluent limitations for pH, (105) oil and grease, (106) total suspended solids (107) and chemical oxygen demand, (108), for example, all of which might be different dep nding upon th material being discharged and other discharg circumstances addressed by the profile.

[0378] It is a preferred embodiment of the present invention that all possibl discharge monitoring reports ("DMR's") be developed and that the system be configured to allow a manager of a regulated entity to select the one DMR that applies to his/her facility, while ignoring those that do not. It should be well known to one reasonably well schooled in the art that DMR's for a variety of different sources such as for example, restaurants, hotels, motels, office buildings, etc. could be similarly developed using this aspect of the invention.

[0379] FIG. 51 depicts one of series of a computer screens prompting an authorized employee or contractor to identify specific kinds and amounts of different wastes generated and the manner in which waste is managed and stored at a facility.

[0380] It should be well known to one well schooled in the art that the specific environmental regulatory requirements applicable to the wastes varies very significantly depending upon the particular waste generated, the amounts generated as well as the particular manner in which the waste is handled and stored at a facility (i.e. as either "hazardous", "solid" or "universal" waste).

[0381] It is a preferred embodiment of the present invention that information provided by a employee or contractor of the screen shown in FIG. 51 may be used to select a plurality of different C-Records needed to comply with solid, hazardous and/or universal waste requirements applicable to the regulated entity.

[0382] For example, referring to FIG. 51, a employee or contractor may be prompted to insert the amount of gallons of antifreeze generated under the column indicating the manner in which antifreeze is handled at the facility. In this example, the employe or contractor would insert the number of gallons across from "antifreeze" under "universal waste" (109) at a facility handling the

antifreez as a universal waste or under "hazardous waste" (110) if antifreeze is handled as a hazardous waste at the facility. It is a preferred embodiment of the present invention that the system might be configured so that the number inserted at either (109) or (110) is multiplied by a predetermined weight per gallon factor to determine the weight of the antifreeze generated, and all such entries for all wastes under any heading (111) may be totaled to indicate the total amount of each waste handled under each heading, and ultimately the specific regulatory requirements and C-Records to be selected to confirm compliance with all applicable waste requirements at a regulated facility.

[0383] In another example, the number of various waste items such as oil filters,(112) transmission filters, (113) and thermostats and switches (114) may be multiplied by predetermined weight per item factor to determine the weight of the oil filters, transmission filters and thermostats and switches generated, and all such entries for all wastes under any heading (111) may be totaled to indicate the total amount of each waste handled under each heading, and ultimately the specific regulatory requirements and C-Records to be selected to confirm compliance with all applicable waste requirements at a regulated entity.

5. Assignment & Transfer of C-Records

[0384] After a profile is completed – the system may be configured to prompt the manager of a regulated entity to confirm positions to be held responsible for completing various C-Records. It is a preferred embodiment of the instant invention to provide a default listing of positions likely to be responsible based upon assignments at other facilities, as might be identified by a service provider, and to allow the manager of a regulated entity to select other positions or confirm the default settings.

[0385] FIG. 52 depicts a computer screen prompting a manager of a regulated entity to either except default assignments of C-Record completion

responsibilities made to various employees and/or contractors by th system, or substitute other employees and/or contractors if desired. This is particularly important because it will establish which employees and contractors will be charged with responsibility for completion of which C-Records.

[0386] It the example provided, the default setting assigns responsibility for UST financial assurance records to the facility accountant, (115) notice of UST ownership transfer requirements to the manager of a regulated entity (116) confirmation of proper fuel delivery to the facility attendant (117). The manager of the regulated entity might leave all in the default mode but reassign notice of UST transfer requirements from the manager of the regulated entity to accountant by clicking on a position drop down box at (118) and scrolling to accountant and clicking on accountant in order to make the selection. The system may be configured to identify and transfer C-Records that apply and ignore those that do not.

6. Role of Internet Service Provider

[0387] It is a preferred embodiment of the present invention that the system be offered for use by customers via a commercial WWW service provider, that might properly advertise and present the invention for consideration by potential regulated entity users. Every reasonable should be made to inform regulated entities about the invention and its ability to assist them in better complying with all applicable requirements, particularly where necessary for the protection of health and environment and to better assure improved homeland security.

[0388] FIG. 53 depicts an example of the main web page of one such possible provider (EHSforms.com Louisiana web sit) that might be used to advertise and provide use of the invention to needy regulated entities.

[0389] FIG. 54 is a comput r screen depicting information about a provid r including qualifications etc., ("Who We Are") designed to allow the employees or contractors to become confident of the capabilities of the provider. This is particularly important because, the nature of the invention is such that the customer must feel this confidence since the systems purports to help assure compliance with *all* applicable requirements.

[0390] FIG. 55 is a computer screen depicting information about a provider including qualifications etc., ("What We Do") designed to allow the employees or contractors to better understand the nature of the service being offered, in order to determine if the use of the invention is well suited to their needs.

[0391] FIG. 56 is a computer screen depicting information about a provider including qualifications etc., ("How We Do It") designed to allow the employees or contractors to become confident of the capabilities of the provider. This is particularly important because, it is particularly important that the customer understand the limits as well as the virtues of the invention.

[0392] FIG. 57 is a computer screen depicting information about the costs of services offered, ("What it Costs"), which is important to make the customer aware that there are multiple pricing packages, with one most likely to be affordable to the customer.

[0393] FIG. 58 is a computer screen depicting information about the level of confidence that the customer may place in the service, ("Our Promise"), once again explaining the limitations of the invention as well as the guarantees.

[0394] FIG. 59 is a computer screen depicting information about the legal ramifications of the use of the invention, ("Legal Considerations") which should be carefully considered by a potential customer before us of the invention. It is particularly important that customers und rstand that the system is not intended

to take the place of legal counsel but rather to supplement assistance from legal counsel.

[0395] FIG. 60 is a computer screen depicting information about the availability of the invention, ("Availability"). The present invention may not be available for every type of regulated activity at every type of regulated facility in every state at any one point in time. Potential employees or contractors should be informed where and when the invention may be available for use.

[0396] Also, it is a preferred embodiment of the present invention that the system and this screen may be modified for use in prompting an authorized employee or contractor to identify the specific type of regulated facility for being operated in order for the system to identify and access the proper regulation module examples of which have been provided in FIGS. 1-10, herein.

[0397] FIG. 61 is a computer screen depicting information about new or modified regulations that may have become effective in various states in which the use of the invention is being offered. The employee or contractor may view a list of key regulations affecting his/her facility that have recently been modified or replaced,

[0398] FIG. 62 is a computer screen depicting a quarterly "Enforcement Summary" of recent Regulatory Agency enforcement activity applicable to various types of facilities in each state in which use of the invention is being offered. The employee or contractor may periodically view this page to keep up with compliance areas of greatest concern to regulatory inspectors. In this way, the system may be used to promote better compliance among employees or contractors.

[0399] FIG. 63, FIG. 64, FIG. 65 , FIG. 66 are computer screen depicting examples of compliance related news stories("In th News") likely to be of interest to employees or contractors.

7. Accessing & Using C-Records to Audit and Confirm On-going Compliance

[0400] The manner in which the system is configured to divide assign responsibilities for completing/submitting all required C-Records among various employees and contractors, so as to assure accurate monitoring of compliance with all applicable requirements, is a preferred embodiment of the present invention.

[0401] The following is an *actual* detailed example of how continuing compliance with *all* applicable requirements promulgated by the Louisiana Department of Environmental Quality (LDEQ) and the U.S. Environmental Protection Agency ("EPA") might be confirmed by any one of a plurality of individual convenience store employees or contractors, at any number of convenience stores dispensing gasoline to motor vehicles in Louisiana. Anyone well schooled in the art will recognize that the following procedures are also adequate to describe the manner in which users might audit facility compliance using the same C-Records described below when first beginning to use the invention.

[0402] In summary, a total of 74 C-Records might be created and assigned for completion to either the: Facility Attendant (5), Manager of the regulated entity (5), UST Monitoring Contractor (7), UST Testing Contractor (15), UST Installation Contractor (26), Stage I Vapor Control Installation Contractor (1), Stage II Vapor Control Installation Contractor (3), and Stage II Vapor Control Testing Contractor (12).

a. Facility Manager

[0403] FIG. 67 depicts a computer screen showing a manager of a regulated entity signing in at the sign in page of a providers web site (119).

[0404] When signing on for the first time, the manager of the regulated entity might normally be directed to complete a facility profile. This would be a one time r quirement, which and he/she would not be required to repeat abs nt significant physical or operational change in the facility.

[0405] This example assumes that the profile has been completed and that the manager of the regulated entity has been directed by e-mail (or otherwise) to sign on *at the end of every month* (as well as any time there is a spill or suspected release) click on "Comply/Confirm" to access his/her Compliance Clipboard" , follow prompts and complete appropriate C-Records. Note, as previously indicated the procedure would be the same if the facility had just begun using the invention and the manager wanted to audit for compliance, except that the manager would click on "Audit" to bring up the same C-Records linked on an "Audit Clipboard" rather than a "Compliance Clipboard". As a result records would be filed as audit or compliance records depending upon the specific reason for which a C-Record is completed.

[0406] FIG. 68 depicts a computer screen showing the "Compliance Clipboard" for the manager of the regulated entity position. *Every month*, he/she would simply sequentially click on each of the 3 C-Records shown at 120, 121, and 122, scheduled to be completed at the end of every month and electronically check to confirm compliance with Primary and Detailed requirements in each C-Record.

[0407] FIG. 69 , FIG. 70 and FIG. 71, show the C-Records in question to be completed monthly by the facility manager. The manager would check appropriate boxes and submit the C-Record, assumedly confirming all "primary" and "detailed" applicable state and federal requirements.

[0408] Normally, no additional C-Records would need to be compl ted by the facility manager. However, if and when there was a random unscheduled event

such as a fuel spill, or a susp cted release from a UST, the manager of the regulated entity might also be directed to comply with applicable requirements by completing and submitting the appropriate spill notification C-Record and/or suspected release notification C-Record as depicted in FIG 72 and FIG.77, respectively.

[0409] Unlike prior art that concentrates on identifying and correcting violations after they occur, it is a preferred embodiment of the present invention to assist each and every responsible employee or contractor to timely comply with applicable requirements as well as to confirm whether or not the employee or contractor has in fact complied.

[0410] Therefore, where applicable each C-Record contains links to additional documents or calculators deemed helpful, particularly where analysis of requirements may be beyond the capability of most regulated entity users.

[0411] Regulatory agency spill notification requirements are in fact quite complex, often making it difficult for many cashiers, attendants and other employees to understand when to notify an agency of a spill, which agency to notify, and what information to provide, if and when a spill should occur.

[0412] The Spill Notification C-Record depicted in FIG. 72 is an example of a C-Record intended to assist a responsible employee or contractor to comply with spill notification requirements. It informs the employee or contractor which agency to notify and what to say based upon answers to a series of questions, some of which are presented for example, in FIGS. 73, and 74. It also informs the user who to notify and provides the user with up to date agency notification information needed to make the notification, as depicted in FIG. 75. Note the screen in FIG.75 may provide updated contacted information for the National Response Center (123) as well as a hyperlink to a memorandum (shown in FIG.

76) which may be used to make a record of the information orally provided to the National Response Center by telephone. (124)

[0413] The manager of the regulated entity might also be assigned responsibility for providing required notifications in the event of a suspected release of fuel from a UST.

[0414] Applicable suspected release notification requirements are quite complex, making it difficult for many facility managers to understand which agency to notify, and what information to provide, if and when a release from a UST be suspected.

[0415] Therefore, the Suspected Release Notification C-Record depicted in FIG. 77 helps the manager of the regulated entity to comply with spill notification requirements by telling the Employee or contractor which agency to notify and what to say based upon answers to a series of questions, only a few of which are presented here for example, as shown in FIGS. 78, and 79. Based on this information the system may indicate the parties to whom oral notice must be given (FIG. 80) and provide a preformatted memorandum which may be completed in order to memorialize the information provided, as depicted in FIG. 81. It should be noticed that the memorandum addresses specific regulatory requirements set forth in the regulations thereby better assuring that the user will be prepared to provide the information need to comply with all applicable notification requirements.

[0416] Lastly, in the instant example, a manager of a regulated entity might be assigned responsibility for revising the facility profile if and when there are any changes in the facility (as where repairs are to be made or new equipment to be installed) likely to result in new requirements, that must be addressed by various employees or contractors. It is a preferred embodiment of the present invention that one individual at each facility may be assigned responsibility for directing on-

going compliance by all others in the event of a physical or operational change in facility triggering a need for additional compliance. It is equally important that this individual be informed to so direct compliance 30-days prior to any such change, in order to assure that various prior regulatory notifications are made prior to actually implementing some types of changes. Hence, the invention as further described in more detail below, will function to direct compliance as well as monitor compliance and better assure that non-compliance will not occur despite changes at the facility.

[0417] If for example, a new reinforced fiberglass tank was scheduled to be installed at a facility, the manager of a regulated entity might revise the facility profile to reflect a change, for example by adding a tank to the unique identifier page shown at FIG. 82, (130) and the system would automatically electronically notify the appropriate employees or contractors of the change and direct them to confirm compliance with new requirements as appropriate, and as further depicted in FIGS 83-89.

[0418] FIG. 83 depicts a screen indicating that the new tank to be installed will be constructed of fiberglass reinforced plastic.

[0419] It is a preferred embodiment of the present invention that the system might be configured so that once the manager of the regulated entity submits a revised facility profile, the system would automatically generate and send an e-mail to other employees or contractors with new C-Record completion responsibilities, such as for example, the UST Installation & Repair Contractor and the UST Testing Contractor, directing such users to access and complete C-Records.

[0420] The UST Installation & Repair Contractor might receive an e-mail notifying him/her of the planned addition, and reminding him/her to design and install the tank as per applicable requirements, and to confirm compliance by

completing the appropriate C-Record within 7-days,as depicted in FIG. 84 (126). Note, all necessary instructions would be set forth in the e-mail.

[0421] FIG. 85 depicts a computer screen showing the UST Installation and Repair Contractor's Compliance Clipboard, which he or she would access within w 7-days after receipt of an e-mail informing him/her that a change in the facility, for the purpose of completing newly assigned C-Records, and FIG. 86 shows the first of 5 different C-Records, required to be completed. Note, the clipboard might well contain a reminder setting forth responsibilities in the event of receipt of a notice indicating that a new tank was planning on being installed. (127) This is a preferred embodiment of the present invention since it is critical in preventing non-compliance before it occurs as opposed to past art satisfied with attempting to undertake corrective action thereafter.

[0422] FIG. 87 depicts a computer screen showing the UST Testing Contractor's Compliance Clipboard. The system may be configured so as to automatically e-mail this contractor, in addition to the UST Installation and Repair Contractor's, so that he/she may also comply with new testing requirements due to the planned addition. The testing contractor would be directed to timely complete appropriate C-Records.

[0423] FIG. 88 depicts a computer screen showing the Tightness Test C-Record required to be completed by the UST Testing Contractor after a new tank had been installed. FIG. 89 presents a view of the Detailed Requirements in this C-Record.

[0424] Similarly, the system might be configured to notify the UST Monitoring Contractor that a new tank had been added requiring monthly monitoring, as well as the facility manager, to remind him/her to file a registration with the LDEQ. Note, all other responsible users would be also be notified to comply, such as for

example, the facility accountant who be required to comply with financial assurance requirements (i.e. bonding) before placing the new tank into service.

b. Facility Attendant

[0425] FIG. 90 depicts a login screen at a providers web site as a facility attendant signs in. (128) By way of example, a convenience store attendant in Louisiana might be required to regularly confirm on-going compliance with certain daily scheduled inspection requirements, as well as various unscheduled compliance requirements (notification of fuel spills and fuel delivery transfer requirements) As a result, the facility attendant might be directed to sign on *everyday,* click on the "Comply/Confirm" button to access his/her Compliance Clipboard containing links to his/her scheduled and unscheduled C-Records, and follow prompts to complete all required C-Records.

[0426] FIG. 91 depicts a computer screen showing the Compliance Clipboard for the facility attendant position. He/she may then sequentially click on each of the 3 daily inspection (scheduled) C-Records required to be completed each day, and electronically check to confirm compliance with applicable requirements in each C-Record as depicted in FIG. 92 , FIG. 93 and FIG. 94, and submit all 3 C-Records.

[0427] Note, the items to be visually inspected are simple and straightforward- "No liquid or solid material in spill buckets" (129); ""Caps good condition locked with gaskets" (130) and "No pipes turn with caps on" (131). The attendant simply checks a box next to each statement for the day of the month in question to indicate compliance (132).

[0428] Normally, no additional C-Records would need be completed by the Facility Attendant. However, if and when there is a fuel delivery, or a spill, the

facility attendant might also b direct d to complete and submit the appropriate fuel delivery C-Record [FIG 95] and/or Spill Notification C-Record. [FIG.72]

c. UST Monitoring Contractor

[0429] The UST Monitoring Contractor has regularly scheduled C-Record completion responsibilities, in addition to any new responsibilities that might arise after change in the facility. He/she might be directed sign on (133) once at the *end of every month* to complete appropriate C-Records, as shown in FIG. 96.

[0430] After signing on, he/she may be directed to click on a "Comply/Confirm" hyperlink, which may easily be included on an opening page to access his/her Compliance Clipboard, as shown in FIG. 97 He/she may then click on one or more monitoring C-Records as appropriate and complete/submit forms to confirm compliance with monthly monitoring reporting requirements, as depicted in FIG. 98-105. Note, that it is a preferred embodiment of the present invention that only C-Records for the particular type of release detection monitoring activities undertaken at the regulated facility would have been assigned to this contractor based upon the information provided by the facility manager when completing and submitting a facility profile.

[0431] As previously noted, it is also a preferred embodiment of the present invention to help each responsible employee or contractor to actually comply with applicable requirements as well as to confirm whether or not the employee or contractor has in fact complied.

[0432] Therefore, where applicable each C-Record contains links to additional documents to help the employee or contractor comply.

[0433] Monthly UST releas detection monitoring requir ments, while not complex must be recorded and available for review during agency inspections.

[0434] The monthly release detection record shown in FIG. 100, is one xample of such assistance.

d. UST Testing Contractor

[0435] The UST Monitoring Contractor has regularly scheduled C-Record completion responsibilities (scheduled annual or 3-year tightness tests), in addition to any new responsibilities that might arise after change in the facility.(initial 30-day tightness test)

[0436] FIG. 106 depicts a facility UST Testing Contractor signing in at the sign in page of the providers web site. (134) The system may be configured to notify the UST Testing Contractor when it is time to perform an annual, or other test, based upon information placed into the database by the Manager of the regulated entity when completing the facility profile. He/she may then be directed to access his/her Compliance Clipboard, depicted in FIG. 107 and complete/submit one or more C-Records as appropriate to confirm compliance with *scheduled* leak detection equipment testing requirements, as depicted in FIGS. 108, 109, 110.

[0437] The UST Testing Contractor would normally have no *additional* ongoing C-Record completion compliance confirmation responsibilities absent receipt of an e-mail from the system informing him/her that changes will being made (i.e., new equipment is to be installed or existing equipment repaired) requiring completion of additional C-Records by the contractor. If an when notified, he/she would sign on, and complete/submit any required additional C-Records shown for example, in FIGS. 111-116, as may be required.

[0438] It is also a preferred embodiment of the present invention to help each responsible employee or contractor to actually comply with applicable

requirements as well as to confirm whether or not the employee or contractor has in fact complied.

[0439] For example, periodic UST tightness testing involves recording very specific test results, some of which may be easily omitted by error.

[0440] Therefore in order to assist in this regard, the UST Tightness Test C-Record includes a detailed preformatted electronic checklist to help the contractor better assure attention to all information required by the regulatory agency, as depicted, for example in FIG. 113 and FIG. 114. Note, the checklist serves the dual function of informing the user of what the detailed requirements are, and at the same time facilitating confirmation that requirements have been met.

e. UST Installation & Repair Contractor

[0441] FIG. 117 depicts a facility UST Installation Contractor signing in at the sign in page of the providers web site. (135)

[0442] After auditing to confirm compliance of existing equipment with design standards, the UST Installation Contractor would normally have no ongoing C-Record completion compliance confirmation responsibilities absent receipt of an e-mail from the system indicating that changes are to be made requiring additional compliance. As with the testing contractor, the system may be configured to notify the UST Installation Contractor if and when new equipment is to be installed or existing equipment repaired, requiring completion of additional C-Records by the contractor.

[0443] If an when notified, he/she would sign on, and access his/her Compliance Clipboard, depicted in FIG. 118, and complete/submit any additional C-Records as may be required, as depicted in FIGS. 119-135.

[0444] For example, if repairs would have to be made to a UST tank, the contractor would be prompted to make repairs as per applicable regulatory requirements and to complete one of the C-Records shown in Figs. 119, 120, or 121 to confirm compliance with the applicable repair standards. It is a preferred embodiment of the present invention that the system might easily be configured to automatically add the appropriate C-Record(s) to the contractors audit/compliance file based upon the revisions made to the facility profile by the facility manager. In any event, in addition to the C-Records, needed for the type of tank, the contractor might also be required to complete the C-Record shown in FIG. 122 in order to confirm or certify the qualifications of the repairman making the repairs, as per applicable regulatory requirements.

[0445] Additionally, if a new UST was to be installed, in addition to meeting applicable tank design standards (not shown) the contractor might be required to install appropriate release detection monitoring equipment for the new UST, and complete the appropriate C-Record depicted in FIGS. 123-129.

[0446] Furthermore, if pressurized piping is to be installed, the contractor might be required to install an appropriate leak alarm or shut off system, and complete/submit one of the appropriate C-Records depicted in FIGS. 130, 131, or 132.

[0447] Lastly, the contractor might be required to complete/submit appropriate C-Records addressing the type of piping installed as depicted in FIGS. 133, 134, or 135.

[0448] It is also a preferred embodiment of the present invention to help each responsible employee or contractor to actually comply with Applicable requirements as well as to confirm wheth r or not th employe or contractor has in fact complied.

[0449] For example, confirmation of compliance with liquid release detection design and installation requirements is complicated by the many technical requirements, all of which must be complied with in order for the facility to be in compliance.

[0450] Therefore in order to assist in this regard, by way of example, the Liquid Release Detection System C-Record might be required to include a far more detailed preformatted electronic checklist than other C-Records, to help the contractor better assure attention to all information required by the regulatory agency, as depicted in a web-formatted C-Record audit screen version, shown in FIGS. 137-140.

[0451] FIG.136 depicts a screen that might be configured to inform a employee or contractor of the various C-Records that have been assigned to his/her position and that he/she might be required to complete either to initially audit for facility compliance and/or periodically complete/submit to confirm on-going compliance. It is a preferred embodiment of the present invention that the same C-Records might be used for either purpose, with the results being transferred to either audit or compliance data files.

[0452] In this example, the contractor has: 2 C-Records to complete (136) and (137) has audited one (138) but not the other (139) and has taken and passed a test on one (140) but not the other (141). It should also be noted that the facility is indicated to be in compliance with all primary requirements in the first C-Record, since there are no requirements left unconfirmed (142) and (143).

[0453] FIG.137 depicts the first of 3 screens presenting one of 3 primary requirements contained in the Liquid Monitoring RDD Design C-Record shown at FIG. 136 at (144) and sev ral detailed requirements under th primary requirement. (145)

[0454] In this example, following the teachings of the invention, all of the detailed requirements (145) would have to be checked for the facility to be in compliance with this first primary requirement. (144) It should be noted that, in this example, the employee or contractor has failed to check any of the detailed requirement boxes in the checklist provided.

[0455] FIG.138 depicts the bottom portion of the screen shown in FIG. 137, showing how the employee or contractor may be prompted to continue on to the next screen. It should be noted that, in this example, the employee or contractor has failed to check any boxes in the checklist provided.

[0456] FIG.139 depicts the second of 3 screens presenting the second of the 3 primary requirements addressed by this C-Record 146 along with several detailed requirements under the primary requirement. 147 In this example, following the teachings of the invention, only one of the 3 detailed requirements 147 would have to be checked for the facility to be in compliance with this second primary requirement. It should be noted that, in this example, the employee or contractor has failed to check any boxes in the checklist provided.

[0457] FIG.140 depicts the third of 3 screens presenting another of the 3 primary requirements (148) long with several detailed requirements under the primary requirement. (149) In this example, following the teachings of the invention, all of the detailed requirements would have to be checked for the facility to be in compliance with this second primary requirement. It should be noted that, in this example, the employee or contractor has failed to check any boxes in the checklist provided.

[0458] Lastly, FIG.141 depicts the same screen shown in FIG. 136, but after the contractor audited using this same C-Record, but this time failed to confirm compliance with any of the 3 primary requirements. Note that the screen

indicates that compliance has not been confirmed (150) b cause each of the 3 Primary requirements was left unconfirmed(151) (152) (153).

f. Stage I Vapor Control Installation Contractor

[0459] FIG. 142 depicts a facility UST Installation Contractor signing in at the sign in page of the providers web site. (154) The Stage I Vapor Control Installation Contractor would normally have no ongoing C-Record completion compliance confirmation responsibilities absent receipt of an e-mail from the system indicating that changes are to be made requiring additional compliance. The system may be configured to notify the Stage I Vapor Control Installation Contractor if and when new equipment is to be installed or existing equipment repaired, requiring completion of additional C-Records by the contractor.

[0460] If an when notified, he/she would sign on, to access his/her Compliance Clipboard, as depicted in FIG. 143, and complete/submit C-Records as may be required, and as depicted in FIG. 144.

g. Stage II Vapor Control Installation Contractor

[0461] FIG. 145 depicts a facility UST Installation Contractor signing in at the sign in page of the providers web site. (155) The Stage II Vapor Control Installation Contractor would normally have no ongoing C-Record completion compliance confirmation responsibilities absent receipt of an e-mail from the system indicating that changes are to be made requiring additional compliance. The system may be configured to notify the Stage II Vapor Control Installation Contractor if and when new equipment is to be installed or existing equipment repaired, requiring completion of additional C-Record by the contractor. If an when notified, he/she would sign on, to access his/her Compliance Clipboard, as depicted in FIG.146, and complete/submit C-Record as may be required, as depicted in FIGS. 147, 148, or 149.

h. Stage II Vapor Control Testing Contractor

[0462] FIG. 150 depicts a facility Stage II Testing Contractor signing in at the sign in page of the providers web site. (156) If an when required he/she might sign on, to access his/her Compliance Clipboard, depicted at FIG. 151.

[0463] The Stage II Vapor Control Testing Contractor might be responsible for completing C-Records needed to confirm compliance with scheduled testing requirements according to schedule and/or when electronically prompted to do so based upon the schedule loaded into the database by the Manager of the regulated entity when completing the Facility profile.

[0464] FIGS. 152-157 depict C-Records that the contractor might have to complete/submit, depending on the type of vapor control system installed, annually or every 5-years. It should be noted that only those C-Records applicable to the particular type of stage II control system indicated as being present at the regulated entity by the facility manager in the facility profile would be transferred to the audit and compliance files of this contractor. For example, if the profile indicated the entity used a vapor balance system only C-Records shown in FIGS. 152, 153 and 154 would be transferred and assigned. On the other hand, if the entity used vacuum assist systems, C-Records shown in FIGS. 155, 156, and 157 would be transferred and assigned.

[0465] Thereafter this contractor would not have no additional ongoing C-Record completion compliance confirmation responsibilities absent receipt of an e-mail from the system indicating that changes are to be made requiring additional compliance.

[0466] The system may be configured to notify th Stage II Vapor Control Testing Contractor if and when new equipment is to be installed or existing

equipment repaired, r quiring completion of additional C-Records by the contractor. If an when notified, he/she would sign on, to access his/her Compliance Clipboard, and complete/submit C-Records for initial post installation testing as may be required, as depicted in FIGS. 158-163, applicable to initial testing requirements for newly installed equipment.

8. Facility Modifications

[0467] It is a preferred embodiment of the present invention to help assure continued facility compliance with all applicable requirements despite changes in the facility such as repair of modification of the facility.

[0468] As previously mentioned, in the preferred embodiment of the invention, the system might be configured to prompt the manager of the regulated to revise the facility profile in the event of any physical and/or operational changes in the facility, likely to result in the applicability of new requirements, which in turn might electronically prompt employees or contractors to complete any additional C-Records as might be required, to comply/confirm compliance with any new requirements due to the modifications.

[0469] The system may be configured to load new, additional C-Records into the files of appropriate employees or contractors based upon input from the manager of the regulated entity indicating that changes will be made which require additional compliance at the facility.

[0470] In this case, the system can likewise be configured to e-mail employees or contractors subject to new requirements to sign on and access/complete C-Record applicable to the new requirements.

[0471] For example, if the facility decides to install a new fiberglass r inforced plastic UST tank at the facility:

[0472] The manager of the regulated entity might access and revise the facility profile to indicate that a new UST tank is being added as depicted in FIGS. 82, (125) and that it will be a fiberglass reinforced plastic tank, as depicted in FIG.83.

[0473] In response the system may be configured to send an e-mail to the UST Installation Contractor directing him/her to complete a C-Record needed to confirm compliance with plastic tank design and installation standards, as depicted in FIG. 84, and he would access his Compliance Clipboard, as depicted in FIG. 85, and complete/submit a C-Record confirming compliance with plastic tank design standards, as depicted in FIG.86, for example.

[0474] An e-mail might also be sent to the UST Testing Contractor directing him/her to access his/her Compliance Clipboard, as depicted in FIG. 87, and access complete and submit a C-Record needed to confirm compliance with post installation tightness testing requirements, as depicted in FIG. 88, showing the primary requirement, and in FIG. 89, showing detailed requirements.

9. Monitoring Continuing Compliance Status

[0475] It is also a preferred embodiment of the present invention to allow the employee or contractor, management and others to regularly monitor and thereby better manage compliance with applicable requirements at any or all facilities via the WWW.

a. Employee or Contractor Audit/Compliance Status

[0476] FIGS. 136 and 141 are computer screens depicting examples of the manner in which the system might be configured to allow any individual

employee or contractor to monitor his/her C-Record audit and/or compliance confirmation completion status, at any time by accessing the forms or C-Record list for his/her position, via the WWW. By way of example, any employee might access a status screen shown in FIG. 136 (audit screen shown) and determine that he/she had audited one C-Record (138) but not another (139). In the example provide, he/she might also see that he/she had previously determined the regulated entity to be in full compliance with all state and federal "Liquid RDD Design and Installation Standards", (142) and that he/she had successfully passed a test on the requirements. (140) Note it is a preferred embodiment of the instant invention that the that the system might be configured to indicate that a facility is out of compliance with these same requirements (FIG. 141) if and when the user should complete user should fail to check all appropriate boxes in the applicable C-Record as shown in FIGS. 137 to 140. It is also a preferred embodiment of the instant invention that the system might easily be configured to display the specific primary requirement(s) for which compliance could not be confirmed (151), (152) (153), and easily configured to allow a user to view detailed requirements associated with each primary requirement by hyperlinking each primary requirements shown in FIG. 141 (151), (152) (153) with the corresponding detailed requirements shown in FIGS. 137-140.

b. Facility Audit/Compliance Status

[0477] FIG. 164 is a computer screen depicting the manner in which the system might be configured to allow a manager of a regulated entity to monitor the audit and/or compliance status of his/her facility, including the completion status of any employees and contractors serving his/her facility, at any time, via the WWW.

[0478] In the preferred embodiment of the invention, and as depicted for example in FIG. 164, it may be configured to allow the manager of the regulated entity to (or any other authorized employ e or contractor) to monitor the compliance status of all employees or contractors responsible for completing and

submitting C-Records at any single facility. In addition, if desired, the system may be configured and color-coded to display a list of all C-Records in any facility database and identify all C-Records that:

[0479] Have been timely submitted, with all boxes, appropriately checked indicating records on file confirming full compliance; (157)

[0480] Have been timely submitted, with all boxes, *not* appropriately checked indicating absence of records on file indicating full compliance; (Red highlight)

[0481] Have not been submitted. (158)

[0482] The system may be configured to automatically notify non-compliant Employees or contractors to implement corrective action where necessary to assure compliance. (159)

c. Facility System Audit/Compliance Status

[0483] FIG. 165 is a computer screen depicting the manner in which the system might be configured to allow a regional manager, national manager, or other authorized individual to monitor the compliance status and better manage compliance at all facilities within any particular system, at any time, via the WWW.

[0484] In the preferred embodiment of the invention, the software my be configured and color-coded to display a list of all facilities in the system, and identify facilities and responsible managers for facilities at which C-Records:

[0485] Have been timely submitted, with all boxes, appropriately checked indicating records on file confirming full compliance; (Green highlight) (160)

[0486] Have not been timely submitted. (Yellow highlight) (161)

[0487] Have been submitted, but without all boxes being checked. (Red highlight (162)

[0488] The software may be configured to automatically notify non-compliant facility managers to implement corrective action where necessary to assure compliance, if desired.

[0489] There have been described and illustrated herein an embodiment of a system and method for a WWW compliance management system. While a particular embodiment of the invention has been described, it is not intended that the invention be limited thereto, as it is intended that the invention be as broad in scope as the art will allow and that the specification be read likewise. Thus, while particular categories of facility regulations, facilities, and facility activities have been disclosed, it will be understood that other types of categories may be used. Furthermore, while particular exemplar C-Records have been disclosed, it will be appreciated that other C-Records may also be used, depending upon the facilities and specific requirements applicable to such facilities.

[0490] It will also be appreciated by those skilled in the art that yet other modifications could be made to the provided invention without deviating from its spirit and scope as so claimed, including for example, use of the instant invention by a state of federal government agency to audit and confirm on-going compliance at any retail, commercial, industrial, or manufacturing facility subject to it's regulatory jurisdiction.

V. CLAIMS

What is claimed is: